

# Public Utilities



Volume 67 No. 2

January 19, 1961

In Two Sections—Section I

« »

## WHEN GOVERNMENT BECOMES LABOR'S BOSS

By the Honorable Robert A. Perry

« »

## Should Philadelphia Transit Go Municipal?

By William J. McKenna

« »

## The Problem of "Double Accrual" of Property Taxes of Public Utilities

By Eric Schenker

« »

## The Landis Report

YOUR CALENDAR OF  
**MICRO POWER**  
**"no-break"**  
 POWER EVENTS FOR

1961

.. by UNITED STATES MOTORS CORPORATION

*New* BRUSHLESS GENERATORS

1ST  
QUARTER

U. S. Motors 5 to 20 kw capacity Micro Power units will feature new "brushless" generators to eliminate brush and slip ring maintenance requirements. The no-break units will also operate at plus or minus 1 per cent voltage regulation to satisfy increasing sensitivity of critical operating equipment.

2ND  
QUARTER

*New* 5 KW DIESEL MICRO POWER

5 KW capacity "diesel" Micro Power units will be available to fulfill growing demand for a thoroughly dependable power supply unit of smaller capacity.

3RD  
QUARTER

*New* LARGER SELECTION

The most complete selection of Micro Power units ever offered will be ready by the second half of '61. Included will be 1 1/2-3 kw gas, or gasoline units — 5, 10, and 15 kw gas, gasoline, or diesel units — 20, 30, 50, 75, 100, 150, 200, and 300 kw capacity diesel units.

4TH  
QUARTER

*New* COMBINATION AC/DC UNITS

For the first time, combination AC/DC Micro Power units will be offered in 3 kw and larger capacities with 48 or 129 volt DC current for energizing transistorized microwave communications equipment, and 120/240 volt AC current for handling non-critical power needs.

GROWING STEADILY  
 MEET YOUR MOST  
 CRITICAL POWER  
 REQUIREMENTS

1952

First Micro Power Unit.

1953

Intensified design and testing program initiated.

1954

First shipments of 3 KW gasoline Micro Power.

1955

First shipments of 5 KW gasoline Micro Power.

1956

First shipments of 10 KW gasoline Micro Power.

1957

First diesel Micro Power Unit.

1958

Further expansion of research and testing program. First 50 KW Micro Power Unit unveiled.

1959

First shipments of 10 KW Micro Power. 100 KW unit designed.

1960

Over 2000 units in operation. Larger capacities on the way.

authorized sales and service representatives

CHICAGO, Ill. • DALLAS, Tex. • DENVER, Colo. • DETROIT, Mich. • JACKSONVILLE, Fla. • JERSEY CITY, N. J. • LOS ANGELES, Calif. • PORTLAND, Ore. • SAN FRANCISCO, Calif.

consult the classified section of your phone directory



UNITED STATES MOTORS CORPORATION

102 West Fifth Avenue • Oshkosh, Wisconsin

Editor-in-Chief • ELLSWORTH NICHOLS

Editor • FRANCIS X. WELCH

Associate Editors • NEIL H. DUFFY

NORMAN J. BARATT

GEORGE E. TURNER

JOHN W. HEWITT

CHARLES M. BRUCH

Assistant Editors • M. C. McCARTHY  
M. L. WILLIAMS

Financial Editor • OWEN ELY

Advertising Manager • E. L. COOKE

Circulation Manager • E. S. STEVENS

#### REPRINTS OF ARTICLES

(200 or more copies)

available on orders received within 30 days after publication date.

Address

WASHINGTON OFFICE  
for quotations.

3 KW  
power.

5 KW  
power.

10 KW  
power.

Power  
of research  
rst 50 K  
unveiled

10 KW  
power.

KW unit

operation

the wa  
scriptions: Address correspondence to PUBLIC UTILITIES FORTNIGHTLY, circulation department, Pennsylvania Building, Washington 4, D. C. Allow one month for change of address.

ives

ONVILLE  
CISCO,

erred as second-class matter April 29, 1915,

under the Act of March 3, 1879, at the Post Office Baltimore Md., December 31, 1936. Copyright, 1961, by Public Utilities Reports, Inc. Mailed in U. S. A.

ITION

# Public Utilities

**FORTNIGHTLY**

VOLUME 67

JANUARY 19, 1961

NUMBER 2



## ARTICLES

### When Government Becomes Labor's Boss

*Hon. Robert A. Perry*

73

A down-to-earth appraisal of what can happen to the workers, at least in the electric utility business, when government takes over.

### Should Philadelphia Transit Go Municipal?

*William J. McKenna*

85

The author gives his reasons for opposing the campaign of Philadelphia's mayor to secure municipal ownership of the transit system.

### The Problem of "Double Accrual" of Property Taxes of Public Utilities

*Eric Schenker*

91

An analysis of a ruling of the Internal Revenue Service which has caused doubt with respect to returns already filed.

## FEATURE SECTIONS

Washington and the Utilities	98
Telephone and Telegraph	102
Financial News and Comment	105
What Others Think	114
The Landis Report	114
Saline Water Conversion	117
Anniversary of Edison Lighting	118
Quebec Power Growth	120
Energy Resources and Government	121
Gas Lamps Again Light Cape May, New Jersey	121
The March of Events	124
Progress of Regulation	129
Industrial Progress	25
• Pages with the Editors . 6	19
• Coming in the Next Issue 10	20
• Remarkable Remarks . 12	40
• Utilities Calendar ....	19
• Frontispiece ....	20
• Index to Advertisers .	40

## PUBLIC UTILITIES REPORTS, INC., PUBLISHERS

Executive, Editorial &  
Advertising Offices ..... 332 PENNSYLVANIA BLDG., WASHINGTON 4, D. C.  
Publication Office ..... CANDLER BUILDING, BALTIMORE 2, Md.

### Advertising Representatives:

New York 6: Robert S. Farley, 95 Liberty Street, COrtland 7-6638  
Cleveland 15: Macintyre-Simpson & Woods, 1900 Euclid Avenue, CCherry 1-1501  
Chicago 1: Macintyre-Simpson & Woods, 75 E. Wacker Drive, CEntral 6-1715  
Pacific Coast: Pugh & Rider Associates, 404 Halliburton Building, 1709 West  
Eighth Street, Los Angeles 17, Calif., HUbbard 3-0537  
and  
Hunter Vinton, 16 Crescent Drive, Palo Alto, Calif.—DAvenport 5-4815

IN POWER PIPING ERECTION

# QUALITY COMES FIRST AT KELLOGG

Field erection by Kellogg of power piping made by Kellogg at its Williamsport plant assures the highest standards of engineering and workmanship. Quality and strict quality control are reflected in every phase of Kellogg field erection.

Making Kellogg responsible for both manufacture and erection, as many electric utilities do, also can mean marked economy in the over-all power piping contract.



lllogg atlogg's Power Piping Division at Williamsport, Pa., welcomes the  
of engin opportunity to tell you more about its field erection service and how it  
re reflec be combined with other Kellogg power piping services to the ad-  
age of the steam-electric and nuclear power generating industry.

and ere  
**POWER PIPING DIVISION / THE M. W. KELLOGG COMPANY**

*A Subsidiary of Pullman Incorporated*

& Hea iquarters: Williamsport, Pa. Sales Offices: 711 Third Avenue, New York 17, N.Y.

**POWER PIPING**



**HEADQUARTERS**



# Pages with the Editors

**T**HE last thing I want is a czar in this field." This is a quotation by the United Press-International shortly after Christmas, of a statement by James M. Landis. It was in response to a question by a news reporter during a telephone interview concerning the proposal of Landis to set up a White House "Overseer" of the federal regulatory agencies. Landis insists that he wants speed—not necessarily centralized control. He says his aim in proposing an "Office for the Oversight of Regulatory Agencies" in the White House is simply to step up the handling of cases and decisions. The severest criticism contained in his 87-page report on the work of the regulatory bodies was that they have become strait jacketed by their own procedural red tape, so that rulings are delayed for years.

FOR those who believe in the paramount virtue of the independence of commission regulation, it is reassuring to know that Mr. Landis, who has tentatively accepted the post of regulatory "Overseer," feels that his rôle will not compromise the essential independence of these quasi-judicial bodies. But we shall be more reassured by the proof of the pudding which he has cooked up for President-elect Kennedy. We must con-

fess that when all the relatively noncontroversial reforms, which have been kicking around Washington for years, are accepted and out of the way, there still remains a serious question of what the proposed "co-ordination" would mean.

**F**OR example, take this idea of regular weekly or monthly meetings by all the chairmen of all the regulatory agencies. With these chairmen meeting regularly in the same conference room, presided over by Mr. Landis, who will presumably transmit the views of the President on the various major questions of policy, it is difficult to see how the centralized control or direction of these agencies can fail to develop on a policy-making basis.

TRUE, individual commissioners would still be ostensibly free to follow their own ideas and then the chairman of the Federal Power Commission, for example, would be removable at the pleasure of the President. But the constant channeling of White House views to the various commissions, via their respective chairmen, will certainly have an inescapable centralizing effect. This may be what "co-ordination" means, but it could also mean the end of independent commission regulation as we have known it to date.



ROBERT A. PERRY

ALREADY there are questions being asked in Congress about what this will mean in terms of Congress *versus* White House control over these regulatory agencies. With Kennedy in the White House and a preponderant majority of his party in control of both branches of Congress, the degree of executive domination may not seem so important. But it is a safe bet that if President Eisenhower had had such powers during the Democratic 86th Congress, and had attempted to use them along the lines suggested, there would have been a great deal to say in Congress and much of it quite critical of the setup.

# New Issues - 1960

Purchased and Offered by Halsey, Stuart & Co. Inc. alone or with associates\*

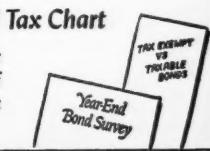
Amount of Issue	Tax-Exempt	Amount of Issue	Corporate	Underwriting Interest
\$1,000,000	ALABAMA EDUCATION AUTHORITY†	\$25,000,000	BALTIMORE GAS AND ELECTRIC COMPANY	
Var. Rates Rev. Bonds (2 issues)		First Ref. Mtge. Bonds, 4 1/2% Series due 1980 . . . . .	\$11,200,000	
\$1,137,000	ALEXANDRIA, VA.	14,000,000	CENTRAL ILLINOIS LIGHT COMPANY	
Var. Rates Bonds		First Mtge. Bonds, 4 1/2% Series due 1990 . . . . .	3,700,000	
\$1,000,000	CHICAGO BD. OF EDUCATION, ILL.†	25,000,000	CHESAPEAKE AND POTOMAC TELEPHONE COMPANY OF WEST VIRGINIA 40 Year 5% Debts. Due 2000	6,800,000
3 1/2% & 3 1/2% Bonds (2 issues)				
\$1,515,000	CINCINNATI, OHIO	125,000,000	CONSOLIDATED EDISON COMPANY OF NEW YORK, INC. First & Ref. Mtge. Bonds, 4 1/2% Series R due 1990 . . . . .	6,750,000
Var. Rates Bonds		First & Ref. Mtge. Bonds, 5% Series S due 1990† . . . . .	9,250,000	
\$2,200,000	DADE COUNTY, FLA.†	35,000,000	CONSUMERS POWER COMPANY	
4.70% Port Auth. Rev. Bonds		First Mtge. Bonds, 4 1/2% Series due 1990 . . . . .	7,000,000	
\$2,525,000	DETROIT, MICH.† (4 issues)	25,000,000	DAYTON POWER AND LIGHT COMPANY	
Var. Rates Bonds & Rev. Bonds		First Mtge. Bonds, 5 1/2% Series Due 1990 . . . . .	10,500,000	
\$1,000,000	DETROIT SCHOOL DISTRICT, MICH.†	25,000,000	FLORIDA POWER CORPORATION	
Var. Rates Bonds		First Mtge. Bonds, 4 1/2% Series due 1990 . . . . .	7,900,000	
\$1,000,000	EAST BAY MUNICIPAL UTILITY DIST., CALIF.	8,880,000	GREAT NORTHERN RAILWAY	
Var. Rates Bonds		Equip. Trusts of 1960, 5% & 4 1/2% Cts. Due 1960-75 . . . . .	4,230,000	
\$1,500,000	EUGENE, OREGON†	50,000,000	ILLINOIS BELL TELEPHONE COMPANY	
Var. Rates Rev. Bonds		First Mtge. 4 1/2% Bonds, Series G Due 1997 . . . . .	13,650,000	
\$1,770,000	FLORIDA STATE BOARD OF EDUCATION	7,755,000	ILLINOIS CENTRAL EQUIPMENT TRUSTS	
Var. Rates Rev. Bonds		3 Series, Var. Rates Cts. Due 1960-75 . . . . .	3,255,000	
\$1,000,000	GREATER BATON ROUGE CONS. SEWER DIST. LA.† Var. Rates Bonds	12,000,000	INDIANAPOLIS POWER & LIGHT COMPANY	
Var. Rates Rev. Bonds		First Mtge. Bonds, 4 1/2% Series, due 1990 . . . . .	5,650,000	
\$1,000,000	KANSAS CITY, KAN.	10,000,000	LACLEDE GAS COMPANY	
Var. Rates Rev. Bonds		First Mtge. Bonds, 4 1/2% Series due 1985 . . . . .	1,500,000	
\$1,750,000	LEXINGTON, KY.†	7,755,000	LOUISVILLE AND NASHVILLE RAILROAD	
Var. Rates Rev. Bonds		Equip. Trust. Series Z, 4 1/2% Cts. Due 1962-76 . . . . .	2,055,000	
\$1,950,000	MAINE, STATE OF†	35,000,000	MICHIGAN BELL TELEPHONE COMPANY	
2.90% Bonds		36 Year 4 1/2% Debentures Due 1996 . . . . .	6,200,000	
\$2,500,000	MARYLAND STATE ROADS COMMISSION†	60,000,000	MIDWESTERN GAS TRANSMISSION COMPANY†	
Var. Rates Rev. Bonds (2 issues)		First Mtge. Pipe Line Bonds, 5 1/2% Series due 1980 . . . . .	4,113,000	
\$1,000,000	MICHIGAN, STATE OF†	7,950,000	MISSOURI PACIFIC RAILROAD	
Var. Rates Rev. Bonds (2 issues)		Equip. Trusts, Series N, 5% & 4 1/2% Cts. Due 1961-75 . . . . .	2,400,000	
\$1,896,000	MICHIGAN SCHOOL DISTRICTS	40,000,000	MOUNTAIN STATES TELEPHONE AND TELEGRAPH COMPANY 40 Year 5% Debentures, Due 2000 . . . . .	6,600,000
Var. Rates Bonds (17 issues)		25,000,000	NATURAL GAS PIPELINE COMPANY OF AMERICA†	
\$7,177,000	MILWAUKEE COUNTY, WIS.†	15,000,000	First Mtge. Pipeline Bonds, 5% Series due 1980 . . . . .	2,062,000
Var. Rates Bonds (3 issues)		15,000,000	NEW BRUNSWICK, PROVINCE OF (CANADA)†	
\$7,000,000	MINNEAPOLIS-ST. PAUL METRO. AIR-PORT COMM. MINN.† Var. Rates Bonds	60,000,000	5 1/2% Twenty-Five Year Debentures, Due 1985 . . . . .	2,100,000
\$4,000,000	NASHVILLE, TENN.	60,000,000	NEW YORK TELEPHONE COMPANY	
Var. Rates Rev. Bonds		Refunding Mtge. 4 1/2% Bonds, Series L, Due 1997 . . . . .	17,400,000	
\$6,200,000	NEW ORLEANS, LA.	15,000,000	NORTHERN INDIANA PUBLIC SERVICE COMPANY	
Var. Rates Rev. Bonds		First Mtge. Bonds, Series K, 4 1/2%, Due 1990 . . . . .	3,150,000	
\$10,000,000	NEW YORK STATE POWER AUTH.†	35,000,000	NORTHERN STATES POWER COMPANY	
Var. Rates Rev. Bonds (2 issues)		First Mtge. Bonds, Series due 1990, 5% . . . . .	8,200,000	
\$2,096,400	NEW YORK SCHOOL DISTRICTS	45,000,000	NORTHWESTERN BELL TELEPHONE COMPANY	
Var. Rates Bonds (25 issues)		38 Year 4 1/2% Debentures, Due 1998 . . . . .	10,850,000	
\$4,500,000	NIAGARA COUNTY, N. Y.	10,000,000	NOVA SCOTIA, PROVINCE OF (CANADA)†	
3% Bonds		5 1/2% Twenty Year Debentures, Due 1980 . . . . .	2,600,000	
\$1,221,000	OYSTER BAY & BABYLON S/D NO. 22, N. Y.† 4.20% & 4 1/4% Bonds (2 issues)	60,000,000	PACIFIC GAS AND ELECTRIC COMPANY†	
4,345,000	PHILADELPHIA, PA.†	72,000,000	First & Ref. Mtge. Bonds, Series FF, 4 1/2% Due 1992 . . . . .	5,100,000
Var. Rates Bonds (2 issues)		72,000,000	PACIFIC TELEPHONE AND TELEGRAPH COMPANY	
\$1,282,000	PENNSYLVANIA STATE PUBLIC SCHOOL BLDG. AUTH. Var. Rates Bonds (2 issues)	9,720,000	33 Year 5 1/2% Debentures, Due 1993 . . . . .	8,300,000
4,900,000	PIMA COUNTY SCHOOL DISTS. ARIZ.†	100,000,000	SEABOARD AIR LINE RAILROAD	
Var. Rates Bonds		Equip. Trusts, Series T & U, 4 1/2% & 4 1/4% Cts. Due 1961-75 . . . . .	3,420,000	
\$5,000,000	PORT OF NEW YORK AUTHORITY†	25,000,000	SOUTHWESTERN BELL TELEPHONE COMPANY	
Var. Rates Rev. Bonds (2 issues)		35 Year 4 1/2% Debentures, Due 1995 . . . . .	23,600,000	
\$3,000,000	PUERTO RICO, CAPITAL OF	12,000,000	TAMPA ELECTRIC COMPANY	
Var. Rates Bonds		First Mtge. Bonds, 5% Series due 1990 . . . . .	4,850,000	
\$6,000,000	SACRAMENTO, CALIF.	60,000,000	TEXAS ELECTRIC SERVICE COMPANY	
Var. Rates Rev. Bonds		5 1/4% Sinking Fund Debentures Due 1985 . . . . .	2,500,000	
\$10,000,000	SACRAMENTO MUNICIPAL UTIL. DIST. CALIF.† Var. Rates Rev. Bonds	18,500,000	UNITED GAS CORPORATION	
5,000,000	SAN DIEGO COUNTY, CALIF.	First Mtge. & Coll. Trust Bonds, 5% Series due 1980 & 5 1/2% Sinking Fund Debentures due 1980 . . . . .	11,050,000	
Var. Rates Bonds				
\$7,000,000	SAN DIEGO COUNTY WATER AUTHORITY CALIF.† Var. Rates Bonds	21,435,000	ADDITIONAL PUBLIC UTILITY BONDS (4 issues)	10,950,000
2,435,000	ST. LOUIS, MO.†	ADDITIONAL EQUIPMENT TRUST CERTIFICATES (5 issues) . . . . .	9,885,000	
Var. Rates Bonds				
\$5,200,000	UNIVERSITY OF ILLINOIS, BD. OF TRUSTEES Var. Rates Rev. Bonds			
3,662,000	VERMONT, STATE OF†			
2.70% Bonds				
\$4,000,000	WASHINGTON, STATE OF†			
Var. Rates Rev. Bonds				
\$4,625,000	WEST ALLIS, WIS.†			
Var. Rates Bonds				
\$5,700,000	WEST HAVEN SCHOOL DIST. CONN.†			
3 1/2% Bonds				
\$8,500,000	WHITE PLAINS SCHOOL DIST. N. Y.†			
3 1/2% Bonds				
\$3,285,340	ADDITIONAL TAX-EXEMPT BONDS (108 issues)			

Descriptive circulars or prospectuses, where available, and current quotations will be supplied for any of these securities upon request.

\*To December 19, 1960. † Issue headed jointly by Halsey, Stuart & Co. Inc. and others. All other issues were headed by Halsey, Stuart & Co. Inc. alone. Not included in these compilations are issues in which Halsey, Stuart & Co. Inc. participated only as a member of an account.

## Send For Year-End Bond Survey and Helpful Tax Chart

Concise survey of 1960 bond market and outlook for 1961, and tax chart to help you determine the value of tax exemption in your income bracket. Write without obligation for folder PF-61



**HALSEY, STUART & CO. INC.**

123 S. LA SALLE STREET, CHICAGO 90 • 35 WALL STREET, NEW YORK

AND OTHER PRINCIPAL CITIES



WILLIAM J. MCKENNA

THE opening article in this issue deals with another aspect of political control over economic operation of business enterprise which is not often noted. That is the question of the impact of government ownership and operation of utilities on the organized labor and union members employed in such operations. The author of this article has a background in both organized labor and legislative experience. He is the HONORABLE ROBERT A. PERRY, a member of the Washington state legislature from a district which is served electrically 100 per cent by the Seattle City Light plant. He is also business representative of Local 46 of the International Brotherhood of Electrical Workers. Born in New York city in 1921 of parents who escaped Russia after backing Kerensky in 1917. PERRY was educated in public schools in the Los Angeles area. He became active in organized labor at the age of nineteen and holds a commission in the Merchant Marine Reserve as a second engineer officer, after service during World War II and in Korea.

PERRY's political career started three years ago when he was elected by a narrow margin on a platform favoring private ownership in the power industry in a constituency of public power consumers. In 1960, however, he led the Democratic ticket, being re-elected by a 59 per cent majority. His opposition came from government power forces, including some

leaders of his own party, which is Democratic.

\* \* \* \*

THE article on whether Philadelphia transit should go municipal, beginning on page 85, comes to us from DR. WILLIAM J. MCKENNA, assistant professor of economics at Temple University. He is a graduate of the University of Pennsylvania (BS, '36; MS, '38; PhD, '51). Since 1946 he has been teaching courses in public utilities, transportation, general economics, and political science at Temple.

\* \* \* \*

DR. ERIC SCHENKER, whose article on double accrual of property taxes begins on page 91, holds a PhD degree from the University of Florida. He has also taught at the University of Florida and the University of Tennessee and is now assistant professor of economics at the University of Wisconsin in Milwaukee. He has been associated with the U. S. Army Engineers and U. S. Bureau of Public Roads on transportation studies.

\* \* \* \*

WE should like to take this occasion to announce that Frederick A. Lavey has been named president and general manager of Public Utilities Reports, Inc., publishers of PUBLIC UTILITIES FORTNIGHTLY, effective January 1, 1961. A graduate of Harvard and the University of Virginia Law School, Mr. Lavey served in the Navy during World War II, following which he practiced law in the firm of Hewes and Awalt, in Hartford, Connecticut, and in the firm of Awalt, Clark & Sparks in Washington, D. C., until 1951. He then joined Public Utilities Reports, Inc., as assistant general manager, became vice president in 1955 and executive vice president and general manager in 1959. O. L. Steidel, former assistant vice president of P.U.R., has been named vice president.

THE next number of this magazine will be out February 2nd.

*The Editors*

# THE POWER TO GROW

## GROWING PAINS CAN BE PLEASANT

System growth is a healthy sign of area prosperity with a bright promise of more to come. But this growth often is accompanied by difficult problems for management. Because rates are set, utility management has no reserve with which to finance expansion and therefore must issue securities.

The utility's past performance, as recorded in its earnings statement, is the basis on which these securities are underwritten. Because an investor analyzes a utility's efficiency and future on its own reports, management must try to consider and control everything that affects profits.

One important area in which the utility can secure greater control over costs is operational dependability. Greater dependability not only means revenue from existing customers, it attracts new industry.

For over sixty-four years, Moloney's record of performance has enabled many companies to report good records of earnings and to obtain financing at very favorable rates. Take the lead out of growth for your system . . . Moloney understands utility problems . . . Moloney Transformers are up to solve them.

Since 1896...MORE POWER TO YOU

MESO-10

M O L O N E Y   E L E C T R I C   C O M P A N Y



MANUFACTURERS OF TRANSFORMERS FOR UTILITIES,  
INDUSTRY AND ELECTRONIC APPLICATIONS

*Sales Offices In All Principal Cities*

FACTORIES AT

ST. LOUIS 20, MO., AND TORONTO, ONT., CAN.

# Coming in the Next Issue...

(FEBRUARY 2, 1961, ISSUE) —

## IMPACT OF DIVIDEND PAY-OUT ON PRICE-EARNINGS RATIOS

Recently, Willard F. Stanley, financial analyst of Brooklyn, New York, made a check up on the impact of high dividend pay-out on utility stock with respect to price-earnings ratios. He selected the electric utility industry because it had the highest average dividend pay-out, and divided 115 companies into three groups: First, those whose pay-out in dividends was over 75 per cent of earnings; second, those between 65 per cent and 75 per cent of earnings; and third, those paying out less than 65 per cent of earnings. He found tangible evidence that the increase in pay-out was invariably accompanied by an increase in price-earnings ratios throughout the entire group. This seems to point to a definite co-relationship between high dividend pay-out and higher price-earnings ratio. Thus, higher market prices should, generally speaking, accompany higher percentage dividend pay-out.

## IOWA POWER'S FRANCHISE VICTORY IN DES MOINES

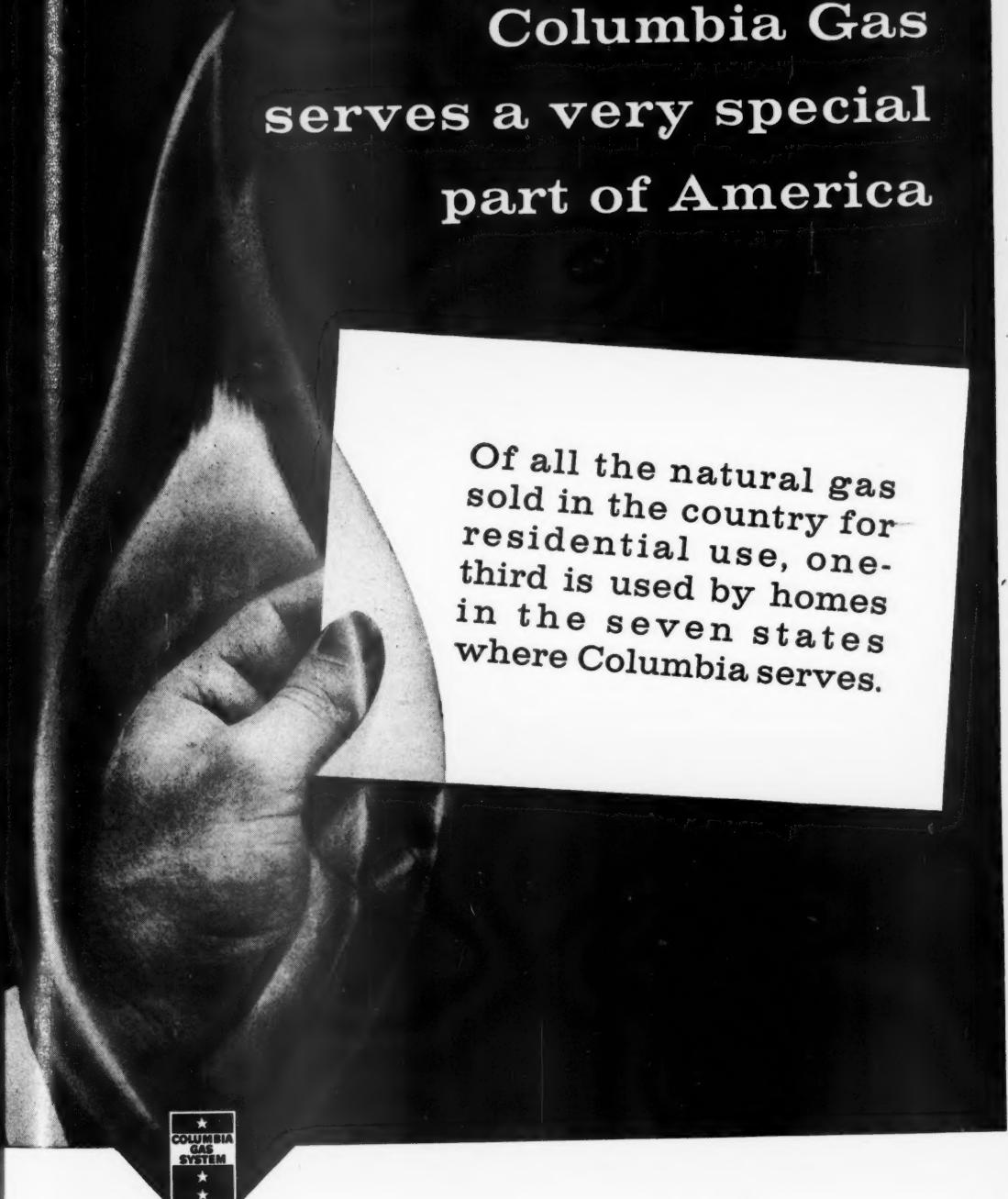
In Iowa, as in many other states, public utility companies are faced with the periodical problem of going before the voters who are also their customers and seeking what amounts to a vote of confidence in the form of franchise renewal. It is not a simple problem. So, where a program has been worked out for such a campaign, the technique can be of value to others having a similar problem. L. E. Slade, vice president and treasurer of Iowa Power & Light Company, tells us how his organization prepared itself for a resounding vote of confidence in which the city of Des Moines renewed the company's franchise for twenty-five years by a margin of 11 to 1.

## ACCOUNTING FOR GAS LINE EXPANSION PROJECT

There are various aspects in the preparation of pipeline certificate cases filed with the Federal Power Commission. One of the most exacting is that in which a natural gas transmission pipeline expansion project is involved. For a blow-by-blow description of the accounting phases of such a proceeding, Paul G. La Grone, now on the staff of Arthur Andersen & Co. and former professor at the College of Business Administration of the University of Arkansas, has written a simplified outline of the accounting problems involved and what is entailed in getting factual data, including market surveys.

**AND IN ADDITION . . .** Special financial news, digests, and interpretations of court and commission decisions, general news happenings, reviews, Washington gossip, and other features of interest to public utility regulators, companies, executives, financial experts, employees, investors, and others.

# Columbia Gas serves a very special part of America



Of all the natural gas sold in the country for residential use, one-third is used by homes in the seven states where Columbia serves.



oughout its service territory—in Ohio, Pennsylvania, West Virginia, Kentucky, Virginia, Maryland and southern New York—natural gas continues to be the *preferred fuel* for home and industry.

THE COLUMBIA  
*Gas* SYSTEM, INC.

COLUMBIA GAS SYSTEM SERVICE CORPORATION  
COLUMBIA HYDROCARBON CORPORATION  
150 EAST 41st STREET, NEW YORK 17, N.Y.

CHARLESTON GROUP: UNITED FUEL GAS COMPANY, 1700 MacCORKLE AVENUE, S.E., CHARLESTON, WEST VIRGINIA. COLUMBUS GROUP: THE OHIO FUEL GAS COMPANY, 99 NORTH FRONT ST., COLUMBUS 15, OHIO. PITTSBURGH GROUP: THE MANUFACTURERS LIGHT AND HEAT COMPANY, 800 UNION TRUST BLDG., PITTSBURGH 19, PA.

# Remarkable Remarks

"There never was in the world two opinions alike."

—MONTAIGNE

C. GUY SUITS  
*Research physicist.*

F. HUGH COUGHLIN  
*President, Central Louisiana  
Electric Company.*

CRAWFORD H. GREENEWALT  
*Chairman of the board, E. I. du  
Pont de Nemours & Company.*

W. THOMAS RICE  
*President, Atlantic Coast Line  
Railroad.*

DAVID H. DAWSON  
*Vice president, E. I. Du Pont  
de Nemours & Company.*

ROGER M. BLOUGH  
*Chairman of the board, United  
States Steel Corporation.*

"Technological change is an exploding growth phenomenon which is rapidly pervading vast segments of human activity, for better or for worse, but in any event, for certain."

"Power plants, slide rules, typewriters, distribution systems . . . all these inanimate things are obviously nothing without a man's touch. That is why employees are our company's greatest asset."

"The story of America is the story of the common men who, whatever their motives, whatever their goals, were inspired to uncommon levels of accomplishment. . . . And perhaps most uncommon of all is the common man whose achievements are exalted beyond the expectation of his circumstances."

"The railroad industry's basic trouble is the lack of sufficient volume of traffic due largely to artificial diversion to other forms of transportation. Diversion is attributable almost wholly to the unfair competitive position in which the railroads are placed by reason of the advantages which have been bestowed upon other modes of transportation and their freedom from regulation comparable to that with which the railroads are burdened."

"It seems to need saying that our biggest obligation to all our public is to earn a profit—not excessive profits, but enough. Enough to justify a continued program of research that will allow new products to spring from this industry and maintain its growth. Enough to allow continued expansion of the industry . . . Enough to allow healthy market development . . . Enough to support the growth of our national economy on a healthy competitive basis, and to push back the growing specter of government control."

"[I am] disturbed by what appears to be a conscious or unconscious campaign of misinterpretation and even misrepresentation, the purpose of which is to place all blame for the inflation upon the pricing policies of American industry. . . . The truth of the matter is that the effect of a rise in the price of steel—or of any other material—is so insignificant in comparison to the overwhelming importance of a rise in wage costs, that it is not—and never can be—a controlling, or even a dominant, factor in the price of finished articles."

# Experienced

Putting the *d* in our experience took more than twenty years' work with every form of figure problem—including yours. The result is a machine that will handle *all* utility figurework . . . today's REMINGTON RAND "99" Calculator.

Experience taught us that accurate figurework is only achieved when your operator and the machine work well together. Answers as high as \$999,999,999,999.99 are as easy as counting from one to ten, on the ten keys of a "99" Calculator. On the printed tape of a "99" Calculator, your operator is always certain all figures are entered and entered correctly. No more second checking and sometimes third and fourth checking. Managers tell us that a "99" Calculator increases operator efficiency by 30% or more. Some of the jobs an operator and one "99" Calculator solve for you are:

**Large User Billing**  
**Fast Meter Adjustments**  
**Minimum Bill Prorations**  
**Operating Statements**  
**Tax Calculations**  
**Payroll**  
**Invoice Verification**

No other calculator works so hard for so little. Costs you only pennies a day to own a "99" Calculator.

#### PRINTS THE ANSWER PLUS YOUR PROOF

Automatically—  
Multiplies  
\$34.56  
 $\times 92$  pos.

Divides:  
945.50/19.70

adds,  
subtracts and  
Credit Balance

3 4 5 6
3 1 7 9 5 2 4
9 7 0
2 4 5 5 0
1 2 5 5 0 *
5 8 7 0 5 7
7 8 9 3 0 7
1 3 7 6 4 4 1
3 1 6 8 9 4 5 -
1 7 9 2 5 0 1 0 a

Call your local Remington Rand Office or Agent (listed in the white pages) for a demonstration and free office trial. Generous trade-in allowance. Or mail coupon for free brochure.

**Remington Rand**

DIVISION OF SPERRY RAND CORPORATION

Room 011-P, 315 Park Avenue South, New York 10, N. Y.  
Please send your brochure "The '99' Printing Calculator" (C1249), no obligation of course.

Name \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_



# The P.U.R. Guide

- A new and different approach to the educational needs of utility employees — called THE P.U.R. GUIDE—is now widely in use throughout the industry. Somewhat descriptively, the GUIDE is referred to as "a journey of understanding." It takes the user through the economics of public utilities and through many other non-technical phases of utility operation. It was organized by and is issued under the general supervision of an experienced staff of specialists.
- THE P.U.R. GUIDE program is a systematically and consecutively arranged series of weekly lessons, in pamphlet form, offering a simplified, progressive, step-by-step story about the nature of the utility business, its important place in the American economy, the present conditions under which it is conducted, its day-to-day objectives and responsibilities, the existing problems with which it is confronted and other current subjects arising in connection with organization, financing, management, operation and regulation. This program adds guidance to experience in the development of the company "management team."



## Features of THE P.U.R. GUIDE

- 50 issues of 8 pages (one each week)
- Certificate of satisfactory completion
- Glossary of words and terms and complete index
- Ring binder embossed with enrollee's name
- Leader's Manual for group discussion
- Occasional reprints from Public Utilities Fortnightly
- Enrollments on company order only

## Next Home Study Program Starts in February

(Enrollment deadline January 31st)

We feel that even those who have been in the utility industry for many years can learn much by just reading the material.

*District Manager, Electric Company*

We all feel that this "information program for utility employees" is a program that is needed in the public utility industry.

*Vice President, Gas Company*

I am sure that the total series of 50 will prove of inestimable value to the utility industry.

*Vice President and General Manager,  
Telephone Company*

*Those in charge of employee education or training may obtain further information from:*

**PUBLIC UTILITIES REPORTS, INC., Publishers**

332 Pennsylvania Building

THE P.U.R. GUIDE program is the best basic public utility information series I have ever encountered.

*Vice President, Gas Company*

Two things have particularly impressed me about THE P.U.R. GUIDE. First, is the complete manner in which your editors treat the various topics; second the simplicity in writing.

*Employment Supervisor, Gas Company*

There is a definite need for such a type program in our industry.

*Training Assistant, Electric & Gas Company*

PLOYE

e

called  
ively,  
h the  
y op-  
enced

ies of  
story  
7, the  
sibili-  
ising  
pro-  
am."

E

index

tnightly

public  
ed.  
company

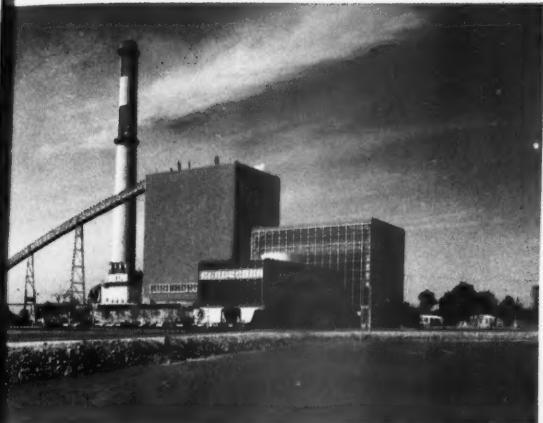
at THE  
which  
the sim-

mpany  
in our

mpany

O. C.

# Efficient new power station gets striking decor

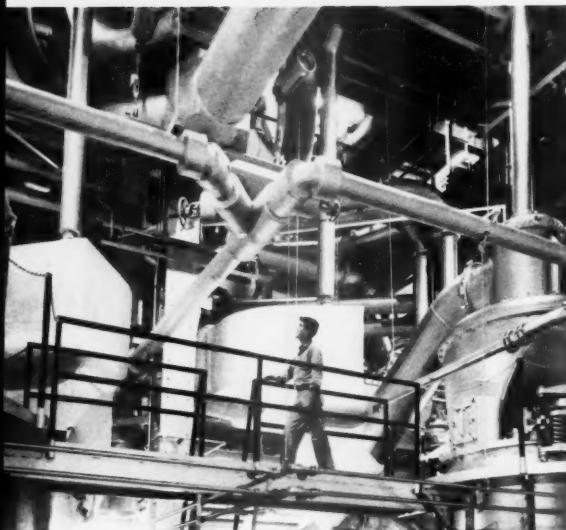


This 150,000 kw turbogenerator is 70 feet long and weighs more than 450 tons. Its generator, liquid cooled, is rated at 192,000 kva. The stator weighs over 130 tons.

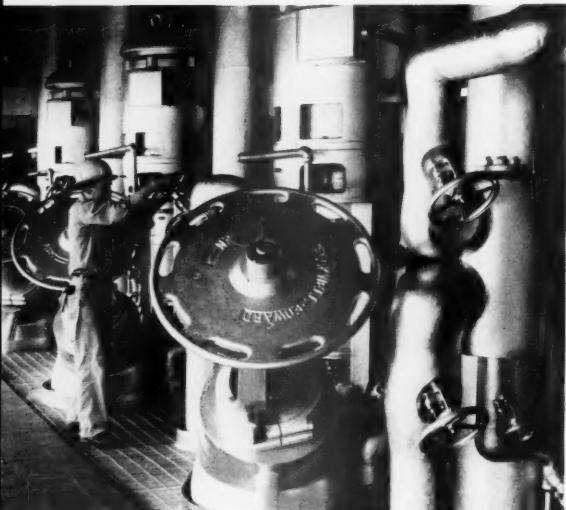
This new generating station, a United Engineers project, features high efficiency at low cost and is an excellent example of what long experience in power plant design and construction can accomplish. It produces one kw of electricity for less than 7/10 of a pound of coal and at full load consumes about 1300 tons daily. Power leaves the substation and enters the transmission system via underground oil-filled pipe-type cables. This attractively landscaped station can provide for the electric needs of a large, heavily populated area.



# Milestone in power plant design



The boiler room displays a complexity of main and reheat steam piping, water and coal piping, as well as one of the four mills for pulverizing coal.



The motors and valves for the large boiler circulation pumps, which receive water from the boiler drum and pump it through the boiler tubes to be converted into steam.

The station uses a forced-circulation-type boiler designed to produce 1,150,000 pounds of steam per hour at 2000 psig, 1000 F, and 1000 F reheat. Water from city mains is treated for use in the boiler. Water for cooling purposes is pumped through the station house into the condenser at the rate of 100,000 gallons per minute.

Virtually no dust or ash particles are blown out of the stack. The station uses a system of mechanical and electrostatic precipitators operating at 99% efficiency. The load-dispatching center, some distance away, directs generator operation by microwave communication. The antenna is located high on the station.



From coast to coast, United Engineers has served on power projects of every magnitude and has repeatedly demonstrated the time and cost-saving advantages assured through efficient coordination of engineering design, purchasing, expediting and construction. The number of new assignments we receive from clients previously served is proof of the confidence placed in us. Why not benefit from our background of over 75 years' experience as design, construction engineers, and engineering consultants.



The compact and convenient control board, heart of the generating station, where rate of coal flow, of air, of water, and of steam are all automatically regulated to conform to the generator load.

**UNITED ENGINEERS**  
& Constructors Inc. • U.E.&C. (Canada) Ltd. • New York • PHILADELPHIA • Chicago

# Twofold Benefits From The Analysts Journal

1. Its timely articles by the nations leading security analysts and economists keep you informed as to methods and trends in the security markets. You will be better able to present your company in its most favorable light if you know the trend of financial thinking as expressed in the official publication of the Security Analysts.
2. Its advertising pages provide a means of putting your story across to the Analysts. There is no more direct and effective way to contact this influential group of investment specialists than to advertise in their own quarterly Journal.

*To Keep Abreast of Investment Markets*

**READ THE ANALYSTS JOURNAL**

•

*To Keep Investment Markets Abreast of Your Company*  
**ADVERTISE IN THE ANALYSTS JOURNAL**

PUBLISHED FIVE TIMES A YEAR BY THE NATIONAL FEDERATION OF FINANCIAL ANALYSTS SOCIETIES

---

**THE ANALYSTS JOURNAL**

82 Beaver Street, Room 1512-14  
New York 5, N. Y.

*Gentlemen:*

Please enter my subscription for one year at the subscription rate of \$5.00—United States; \$5.50—Canada.

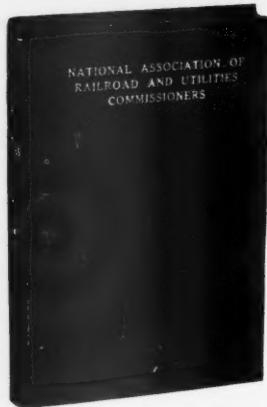
Please send me your advertising brochure.

Name .....

Address .....

.....

.....



# PROCEEDINGS 1959 CONVENTION AT PHILADELPHIA, PENNSYLVANIA NATIONAL ASSOCIATION OF RAILROAD AND UTILITIES COMMISSIONERS

THIS edition contains valuable material on the subject of regulation of rates and services of public utilities and transportation companies including the following:

Rates of Public Utilities and Transportation Agencies, Valuation, Railroad Problems, and Regulation of Public Utilities, Panel Discussion on the subject of "Inflation and Its Effect on Utility Regulation of Rates and Utility Financing," Addresses on "Legislation Affecting the Federal Regulatory Process" and "The Impact of the Supreme Court Decision in the Service Storage and Transfer Case." This volume contains a complete transcript of the addresses and committee reports of the 1959 Philadelphia meeting. The book is printed and bound in regular book cover.

Price \$10.00—Approximately 500 Pages

## OTHER PUBLICATIONS OF THE ASSOCIATION

### 1957—Uniform System of Accounts for Water Utilities

Class A & B—128 pages	
Accounts for utilities having annual water operating revenues of \$250,000 or more	... \$4.50
Class C—100 pages	
Accounts for utilities having annual water operating revenues of \$50,000 or more but less than \$250,000	... 3.50

Class D—64 pages	
Accounts for utilities having annual water operating revenues of less than \$50,000	... 2.00

### 1958—Uniform System of Accounts for Electric Utilities

Class A & B—169 pages	
Accounts for utilities having annual electric operating revenues of \$1,000,000 or more	... 4.50
Class C—125 pages	
Accounts for utilities having annual electric operating revenues of \$150,000 or more but less than \$1,000,000	... 3.50

Class D—59 pages	
Accounts for utilities having annual electric operating revenues of less than \$150,000	... 2.00

### 1958—Uniform System of Accounts for Gas Utilities

Class A & B—212 pages	
Accounts for utilities having annual gas operating revenues of \$1,000,000 or more	... 4.50
Class C—130 pages	
Accounts for utilities having annual gas operating revenues of \$150,000 or more but less than \$1,000,000	... 3.50

Class D—60 pages	
Accounts for utilities having annual gas operating revenues of less than \$150,000	... 2.00

### 1958—Regulations Governing the Preservation of Records of Electric, Gas and Water Utilities

Telephone Separations Manual (Revised October, 1957)	... 1.00
	2.00

### Local Service Telephone Rates (Revised 1957)

This includes the rates for all exchanges of the Bell System Companies, the rates in exchanges servicing cities of 50,000 population or more (both Bell and Independent), and a tabulation of exchanges which had a ten cent coin telephone rate as of June 30, 1957. (with set of revised pages for 1958)	... 2.00
--	----------

### Local Service Telephone Rates—Set of 75 revised pages only for 1958

1.25

### Depreciation:

1943—1944 Reports of the Committee on Depreciation. A comprehensive and complete analysis of the problems of depreciation on public utility regulation	... 4.50
1946—Methods of Pricing Retirements from Group Property Accounts	... 1.25
1948—Half Cycle Methods of Estimating Service Life	... 1.00
1948—Letter Symbols for Mathematics of Depreciation	... 1.00
1959—Report of Committee on Depreciation	... .15

(When remittance accompanies order, we pay forwarding charges)

NATIONAL ASSOCIATION OF RAILROAD AND  
UTILITIES COMMISSIONERS

P. O. BOX 684

Washington 4, D. C.

# Utilities Events Calendar

## CHECK THESE DATES:

Jan. 19-20—Edison Electric Institute, Industrial Relations Committee, will hold meeting, St. Louis, Mo.

Jan. 20—Southern Gas Association, Accident Prevention Committee, will hold meeting, Mobile, Ala.

Jan. 20-22—Advertising Association of the West will hold midwinter conference, Tucson, Ariz.

Jan. 21-22—Annual Retail Advertising Conference will be held, Chicago, Ill.

Jan. 23-24—Industrial Heating Equipment Association, Inc., will hold meeting, Dearborn, Mich.

Jan. 23-26—Canadian Electrical Association, Eastern Zone, will hold meeting of all sections, Halifax, Nova Scotia, Canada.

Jan. 23-27—Doble Engineering Conference will be held, Boston, Mass.

Jan. 24-26—Georgia Radio and Television Institute will be held, Athens, Ga.

Jan. 25-26—Southeastern Electric Exchange, Legal and Claims Committee, will hold meeting, Miami Beach, Fla.

Jan. 26-27—Pennsylvania Electric Association, Structures and Hydraulics Committee, will hold meeting, Philadelphia, Pa.

Jan. 27—Pennsylvania Gas Association will hold midwinter sales conference, Philadelphia, Pa.

Jan. 27-29—Women's Advertising Clubs will hold eastern intercity conference, Philadelphia, Pa.

Jan. 29-Feb. 2—National Association of Home Builders will hold annual convention and exposition, Chicago, Ill.

Jan. 29-Feb. 3—American Institute of Electrical Engineers will hold winter general meeting, New York, N. Y.

Jan. 30-Feb. 3—American Society for Testing Materials will hold committee week, Cincinnati, Ohio.

Feb. 1—Advertising Federation of America will hold annual midwinter conference and congressional reception, Washington, D. C.

Feb. 1-2—Edison Electric Institute, Sales Division, Commercial Cooking and Water Heating Committee, will hold meeting, Atlanta, Ga.

Feb. 1-3—American Water Works Association, Indiana Section, will hold meeting, Indianapolis, Ind.

Feb. 1-3—Military Electronics Convention will be held, Los Angeles, Cal.

Feb. 2-3—American Gas Association-Edison Electric Institute, Accounting Conference, will hold final working meeting, Louisville, Ky.

Feb. 5-7—National Association of Purchasing Agents, Public Utility Buyers Group, will hold meeting, Detroit, Mich.

Feb. 5-11—National Electrical Week will be held.

Feb. 6-10—Western Winter Radio-Television and Appliance Market will hold western merchandise mart, San Francisco, Cal.

Feb. 7-9—Electrical Manufacturers Exposition will hold biannual meeting, Columbus, Ohio.

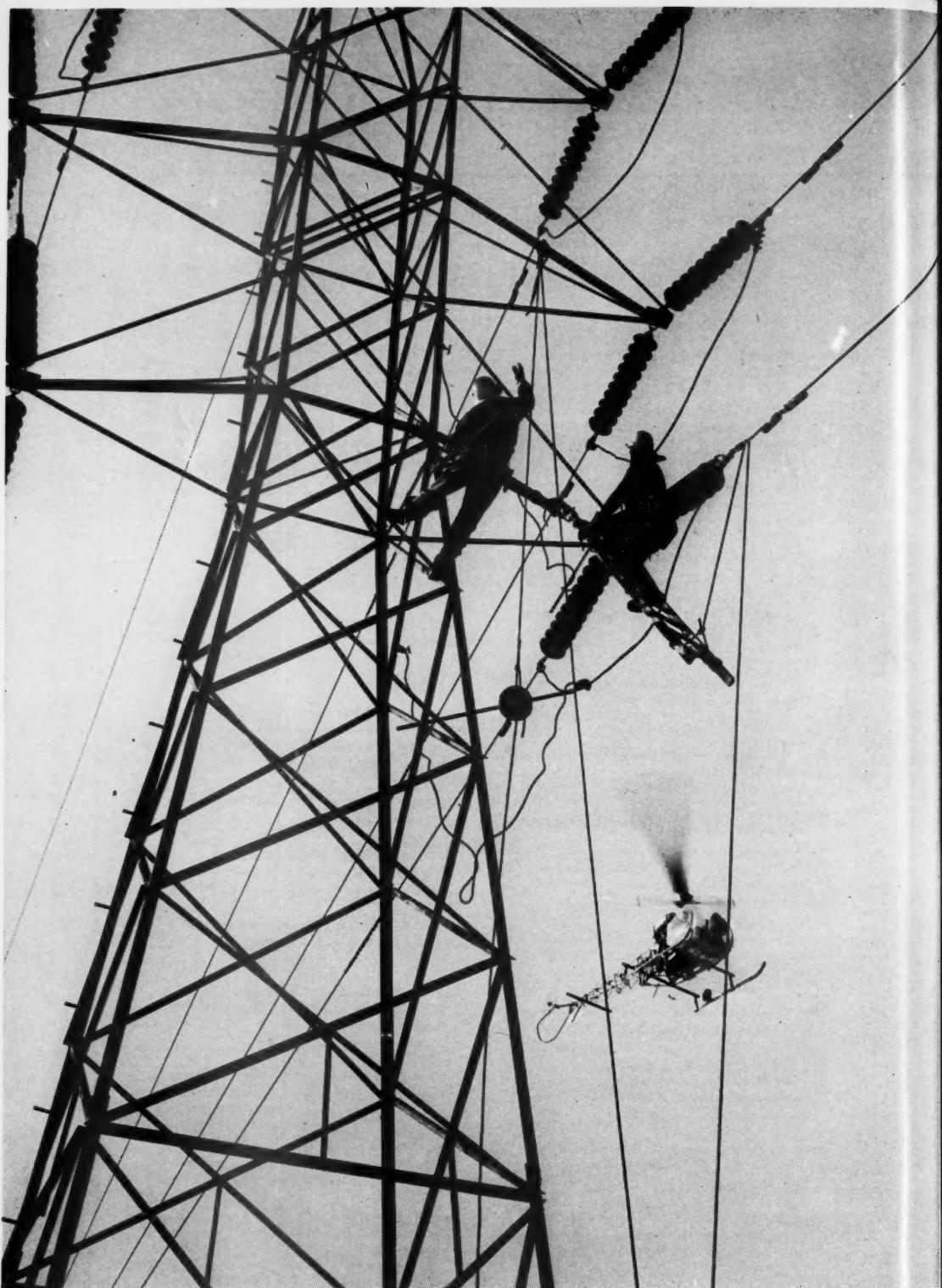
Feb. 8-10—American Gas Association-Edison Electric Institute, Taxation Accounting committees, will hold meeting, Columbus, Ohio.

Feb. 9-10—Missouri Valley Electric Association will hold industrial and commercial sales conference, Kansas City, Mo.

Feb. 9-11—American Gas Association will hold home service workshop, Cleveland, Ohio.

Feb. 9-11—National Telephone Co-operative Association will hold annual meeting, Dallas, Tex.

Feb. 10-11—Air-Conditioning and Refrigeration Wholesalers will hold annual convention, Chicago, Ill.



Courtesy, The Hartford Electric Light Company

### Helicopter, Ahoy!

More and more utilities are utilizing the versatile and practical talents of helicopters. The Hartford Electric Light Company uses them for tower patrol, transport, lifting jobs, and special assignments in inaccessible areas.

# Public Utilities

*FORTNIGHTLY*

VOLUME 67

JANUARY 19, 1961

NUMBER 2



## When Government Becomes Labor's Boss

By THE HONORABLE ROBERT A. PERRY\*

When government goes into the business of making and selling electricity, organized labor shares with utility investors and management the problem of how to deal with what might be called the "wall of sovereignty" which surrounds and protects the state in all of its activities.

ELECTRIC utility workers of public power agencies have learned from bitter experience that the same immunities of government that operate so unfairly in competition with private ownership, can also prove a harsh and ruthless weapon against union labor. I shall show that at the hands of a bureaucracy that prefers cheaper electric power at the sacrifice of the workers' share,

\*Member, Washington state legislature. For additional personal note, see "Pages with the Editors."

labor is forced to submit to cheapened wages and lowered standards.

On occasion union-busting public power, backed by the immunities of the sovereign, has blacked out organized labor on a statewide basis. Restoration of long-established union recognition was bluntly denied with an unprecedented threat of the use of troops. As a result wages, working conditions, and safety provisions in that area are now sharply below union levels. Moreover, even when bureaucracy

## PUBLIC UTILITIES FORTNIGHTLY

has seen fit to grant token recognition, the cards are still stacked against the union in bargaining with an employer legally immune from all the restrictions and penalties that protect the worker in his private job.

As an almost universal rule, wages and working conditions of public power agencies are shaded in varying depths *below* the standards set by contracts of organized labor in negotiation with private management. And even the private contract provisions could be more favorable but for the depressing effect of government price competition.

THESE are only some of the reasons which demonstrate that the exercise of the powers of sovereignty—delegated solely for the conduct of governing functions—in government operation of a proprietary business competing with a private enterprise of the same kind, is not only bad public policy but also a breach of the basic social contract on which our system of government is founded.

Simple fair play should require that when government invades the market place it should observe the rules of the market place. But if it should observe the same rules, what would be the point of supplanting the flexible, highly skilled, adequately compensated, and fiercely competitive business executive system with time-serving, brass-bound bureaucracy? What would be the advantage to government if it had to submit to taxes and regulation by local government agencies, and to its own ironclad tax, labor, and regulatory laws? And who would watch the watchman?

From behind this wall the state can and

does do business in tax-free competition with the very source of its support—the taxpayer. From behind its legal shield it can and frequently does refuse to recognize or to bargain collectively with its organized employees. It cannot sign a valid labor contract and its "labor agreements" are, in the final analysis, only unilaterally binding—on labor. Labor's fundamental last resort, the right to strike, is denied and, at the federal level, is a crime legally linked with treason.

### Bureaucracy Becomes Labor's Boss

THE doctrine of sovereignty as applied to employment in occupations identical to those available in similar free enterprise operations provides the basis on which organized labor should part company with government ownership of commercial and industrial undertakings. The sorry history encompassing the past twenty years of labor relations with the very nonfederal public power agencies which have been created, subsidized, or fostered by federal power policies, fully justifies such conclusion.

Generation and sale of electric power, created by harnessing the falling waters of flood-control and reclamation dams, are obviously prudent and necessary incidents to federal development of natural resources. The same prudence, however, should require that government protect the taxpayer by obtaining the highest price return, exactly as in the sale of any other surplus government property.

This principle is violated when conditions of the sale of federal power are imposed which result in favoritism and price subsidy to certain classes of purchasers selected because of their status as

## WHEN GOVERNMENT BECOMES LABOR'S BOSS

tax-exempt government or co-operative agencies. When the federal government further proceeds to assume total utility responsibility for all additional power requirements of such favored classes by constructing steam generators in plants as in TVA, and proposed elsewhere, then the sovereign has clearly embarked on a program of commercial enterprise that could put the total energy resources of the nation in the hands of government bureaucracy, federal and local. The record shows that to the extent that bureaucracy becomes labor's boss, all electrical workers, union or nonunion, will suffer.

### Government Ownership Hurts Many

WHEN government invades the boundaries of private enterprise the first to protest are the first hurt: investors and management of injured private competitors. Next are the taxpayers on whom must fall the added burden caused by tax-exempt commerce, and then the business community generally. After twenty-five years these factors should be fairly well known, even though the seeming public apathy to the growth of state ownership raises the question as to whether the public yet fully understands the social and political as well as the economic harm inherent in this parasitical growth.

Less known and even less understood is the plight of the union workingman when government meets the payroll. Few people realize that employment by the state at any level automatically extinguishes hard-won rights and privileges of labor secured by law to private employment. Our own union members, who were formerly employed under

union contracts but whose jobs were no longer protected when public power took over, have learned the bitter lesson that below-scale wages and working conditions have followed when bureaucracy becomes the employer.

ORGANIZED labor itself has been tardy in fully recognizing this problem. As recently as 1953, the late D. W. Tracy, president of the International Brotherhood of Electrical Workers, called attention to the growing alarm of unionism as to its status in government employment:

Twenty years ago the IBEW was a strong supporter of public power as a check and yardstick on the private power companies. We stood on that position because we believed it was in our own interest and the interest of the public. Our experience in recent years has convinced us that it is now necessary to have a check and a yardstick on public power. . . .



## PUBLIC UTILITIES FORTNIGHTLY

Union conditions and collective bargaining agreements can best be secured if the construction and operation . . . are performed by private utility companies. This is a point of most vital importance for it has been our experience in many localities that public operation of power facilities has meant the destruction of collective bargaining agreements and local unions. In the state of Nebraska, for example, the public power authorities claimed sovereign rights and eliminated the collective bargaining agreements previously held by the IBEW with private companies. The IBEW has had similar adverse experience with public power authorities in other states. Furthermore, in the case of private operation, we have the right to strike if the management becomes arbitrary; we have no such right in the case of public operation—labor has no check on the arbitrary action of public power management.

### How Federal Power Grew

LOOKING back a quarter century, it is easy to understand, in the climate of those times, the ready public acceptance of the suddenly enlarged rôle of the federal government in the electric power field. PWA loans and grants for local public power projects were based, in those depression years, on the need for employment relief and economic revival. Federal power development was supposed to offer something for everybody: cheaper power, yardstick competition, reclamation of arid lands, flood control, comprehensive development of natural resources, relief of depressed areas—all to be “self-liquidating.”

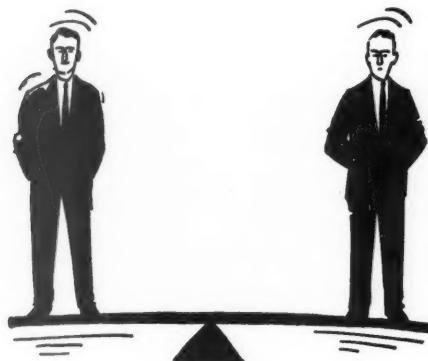
It was not until years later that disillusioned labor came to grips with the problem of labor relations under government ownership. The conflict came slowly because the Tennessee Valley Authority and other federal power agencies realized from the beginning that sound national politics required the friendship of union labor. Their policies have been as generous, generally speaking, as private management's—except that all protective federal labor laws are inoperative and labor's final resort, the right to jointly refuse to work, to strike, is of course denied.

### How Federal Agencies Sell Power

EXCEPT to serve individual industrial customers—the big-time corporate vested interest in the federal power subsidy—the United States agencies have avoided retail sale. Leaving distribution to preferred local public agencies, they reserve to themselves the rôle of wholesale—and, where possible, sole—supplier. However, federal policy is designed to create compelling incentives for the growth of public power at the local level.

The federal government has been the fostering agent both by the earlier PWA grants and loans and by the “preference clause,” applied uniformly to all federal power projects, which directs that un-taxed local public power agencies and tax-exempt co-operatives shall receive preference treatment in the sale of federal power. Although long-term firm contracts protect the government's direct-sale industrial customers, growing demands of preference purchasers limit the sale of a rapidly diminishing surplus to private utilities.

## WHEN GOVERNMENT BECOMES LABOR'S BOSS



The effect of this pernicious clause has been to encourage and even force the spread of local government and co-operative ownership. In fact, the model of nationalization of the electric utility industry has long been established as a partnership between the federal government as the generator and the chief, if not the sole, supplier of all power, with retail distribution the chief, if not the sole, function of local public agencies. The pattern was set when TVA area private power companies were forced to sell out to local public distributors in 1939, which had been voted into municipal ownership specifically to qualify for preference clause treatment.

### A Word about Rural Co-ops

At this point a short digression is necessary to fit into the labor-public power picture the rôle of that curious political hybrid, the rural electrification co-operative, one of the principal sources of labor friction. Their spokesmen stoutly claim the rural electric co-operatives are a part of the free enterprise system.

Yet this country would be broke if all free enterprise organizations enjoyed the same special favors of the federal government under which the electric co-op system grows fat.

More than a thousand of them have a key to the backdoor of the federal Treasury, giving them access to virtually unlimited credit at 2 per cent interest, half of what Uncle Sam pays for long-term money. Nearly three billions of REA loans are outstanding at that rate. By a special dispensation the income of these outfits goes scot-free of federal taxation. And by a further dispensation they share, exactly as if they were another local government power agency, at the subsidized trough with other purchasers of federal power.

REA loan funds, authorized by Congress for the electrification of farms, have been diverted to construction of huge steam-generating plants and transmission lines for lease and operation and eventual ownership by federal power agencies—after Congress had specifically denied funds to these agencies for the

## PUBLIC UTILITIES FORTNIGHTLY

same purpose. The neat interagency collusion not only reveals an impudent disrespect for the intent of Congress, but also exposes the thrusting drive of bureaucracy to promote government ownership at all costs.

In short, although they are clubby little groups of private citizens, less than half of whom are farmers, these co-ops enjoy many of the major benefits of the wall of sovereignty. As might be expected, the REA co-op labor relations record ranks with the poorest among public power groups.

The same can be said for the somewhat similar irrigation district membership organizations of the West where, in at least one instance, mere membership in a labor union is cause for automatic discharge.

### Effects of Tax Exemptions

THE drastic impact of government ownership was felt first and most severely at the level of local government when the tax-paying unionized private systems were supplanted by tax-exempt, union-busting public power agencies. It was here, for example, that union recognition was wiped out on a sweeping regional basis.

It was at this level, too, that scores of school districts and other taxing units were reduced to extremities from tax losses due to the public power take over. In my own state of Washington, nonfederal public power will hold title to approximately \$1 billion worth of real estate when presently planned construction is completed. Despite the heavy demands on all taxpayers to support our school system, the contributions of these

government businesses fall far short of their fair share.

This problem was brought home to me in specific dollars and cents in the last session of the state house of representatives in which I served as vice chairman of the committee on ways and means and on the subcommittee on revenue and taxation. The tax escapement of public power, both federal and local, has penalized the state's taxpayers by many millions annually.<sup>1</sup>

THE nature of the inherent conflict between organized labor and the sovereign as an employer has been brilliantly analyzed by Sterling D. Spero, of the faculty of New York University. In the opening paragraph of his chapter on "The Sovereign Employer" in "*Government as Employer*," the problem is succinctly stated:

Government asserts that its relation to those who earn their livelihood in its service is different from the relation of private employers to their employees. To private employees government guarantees freedom to organize, to bargain collectively with their employers, to strike. It claims, however, that the means used by workers in private employ to bring pressure upon their employers to improve their conditions have no place in the public service and that their use would represent a derogation of sovereignty and an attack on the authority of the state. Government

<sup>1</sup> (Editor's Note: After a campaign focused on Mr. Perry's opposition to public power, the author led the Democratic ticket in his district to be re-elected last November to the state legislature by a handsome 60 per cent majority. His constituency is composed entirely of public power patrons of the Seattle municipal electric system.)

## WHEN GOVERNMENT BECOMES LABOR'S BOSS

insists that, in order to preserve the integrity of public authority, it must possess the right of final determination in all its employment relations.

As President of the United States, Franklin D. Roosevelt, surely a friend of labor, was explicit on this point. Writing to the president of a federal employees' union, Luther C. Steward, on August 16, 1937, the President asserted:

Particularly I want to emphasize my convictions that militant tactics have no place in the functions of any organization of government employees. . . . Since their own services have to do with the functioning of the government, a strike of public employees manifests nothing less than an attempt on their part to prevent or obstruct the operations of government until their demands are satisfied. Such actions looking toward the paralysis of government by those who have sworn to support it is unthinkable and intolerable.

### High Wall of Sovereignty

As applied to the usual run of federal jobs, the Roosevelt no-strike doctrine may be sound public policy. A strike in the Pentagon, for example, would be unthinkable. But the policy is also public law and applies with equal force to government employees even in industrial fields pre-empted from private enterprise.

The theory of sovereignty as extended to employment is supported by stern law. To strike against the federal government or *even to belong to a union which professes to support the right to strike* is a

felony subject, of course, to imprisonment. The same section of the statute dealing with this "crime" lumps it together with the treasonous and subversive activities of federal employees and applies the same penalties.<sup>2</sup> Elsewhere the additional penalty of a three-year black list from federal employment is also added.

That is what can happen to labor when government, protected by this wall of sovereignty, moves into fields hitherto occupied by private employers.

ALTHOUGH federal power agencies have tried to keep clear of antilabor bias, federal policy in a number of directions has made possible the enormous growth of public ownership at lower levels of government where organized labor has suffered serious injuries. Perhaps the largest group in this class are the state-chartered, usually county-wide, public utility districts, and the state power authorities.

In addition to the municipal systems in the TVA area, a considerable number of

<sup>2</sup> See §§ 1 and 3, Public Law 330, 84th Congress, 1st Session (69 Stat 624, 625); see also § 305, Labor Management Relations Act of 1947 (61 Stat 160).



## PUBLIC UTILITIES FORTNIGHTLY

local government agencies purchased private systems forced on the market by the dissolution orders of the Securities and Exchange Commission under the Public Utility Holding Company Act. Chief among these were San Antonio, Texas, and all of the private systems in Nebraska. These agencies were able to issue tax-exempt revenue bonds to be supported by the additional revenues made available by exemption from the federal corporate income tax of 52 per cent in amounts sufficient to far outbid possible private purchasers. (This racket not only further fattened by many millions the purses of certain already fat cats of Wall Street at the expense of the ratepayers, but it also rubbed off some of the synthetic gloss of selfless "public interest" from the supposedly idealistic public power movement.)

### PUD's in Nebraska

**I**N this context, the Nebraska story requires special emphasis. Almost within the space of one year, 1939, all of the 14 privately owned utilities serving the entire state, outside of Omaha, were sold to state-chartered public power districts. Overnight the rights of labor in this industry were wiped out. Once in the saddle, public power promptly shed its cloak of phoney liberalism and stood revealed in its true image of standpat reaction. Union recognition, collective bargaining, and the hard-won beneficial stipulations in the previous contracts were summarily rejected. Relief under the federal labor laws, the unions suddenly and bitterly learned, was the exclusive privilege of first-class citizens, employees of private management.

In the years that followed, labor-management relations steadily worsened as union officers vainly struggled to retain a semblance of the rights labor had formerly freely possessed. Having exhausted every other resource, the final recourse—the strike—was reluctantly invoked in 1944. Federal troops had not been used against strikers since the bloody Pullman strike of 1892. Yet, despite the orderly and peaceable conduct of the strikers, management threatened them with an Army take over. To make a sad story short, the union was overpowered by the sovereign might, and the strike was broken. Employee morale is still affected by the aftertaste of that defeat.

When a utility district finally took over the Nebraska Power Company of Omaha two years later, the management, largely retained from the former régime, succeeded in breaking away from the strike-breaking antiunion policies of out-state public power. Harmonious labor relations, accompanied by recognition and collective bargaining, were continued.

### Some Important Differences

**T**HE comparative wage scales for union *versus* nonunion electrical workers in Nebraska provide a telling deadly parallel. In this business wages are determined from the top figure which is always paid to the most hazardous and most highly skilled job, the experienced lineman. According to the most recent figures available to me—March, 1960—the Omaha union lineman was paid \$3.12½ an hour. At that time the highest paid nonunion public power lineman in the balance of the state received only

## WHEN GOVERNMENT BECOMES LABOR'S BOSS



\$2.39 an hour. For the same job his Omaha colleague received 30.75 per cent more. In a year the difference would amount to about \$1,600. As recently as December 31, 1958, unorganized Nebraska linemen were receiving as little as \$1.80 an hour. In addition, many of the fringe benefits relating to overtime pay, working conditions, and job security long ago won by union negotiations, are a thing of the past in outstate Nebraska. The whole picture reveals a convincing black-against-white study of what can happen when public power takes over. The contrasting fact that Omaha, the lone unionized exception, is itself a public power community only emphasizes the general antiunion posture of the government ownership movement in general.

**T**ODAY the local government-operated utility system that does enjoy good harmonious labor relations is the rare exception that proves the rule. Here are a few interesting figures that prove the point better than a bushel of words: (1) Of the 1,782 municipal electric systems in the United States, only 3 per cent even recognize the union; (2) of the 63

PUD's, 35 per cent accord union recognition. The 1,032 tax-exempt REA cooperatives show up with only 17 per cent union recognition. The private companies are 92 per cent organized. IBEW represents 75 per cent of the membership of all organized electric utility workers.

**I**F we are to believe its national advertisements, Nebraska today is the showcase of public power. Its wholesale supply organization, the nonunion Nebraska Public Power System, candidly hooks its nation-wide publicity to attract industry with the bait of "right to work" laws, a docile labor supply, and allegedly ample low-cost electric energy. The executive manager of this system, D. J. DeBoer, is current president and spokesman for the American Public Power Association, a powerful lobby for the promotion of government ownership.

To Mr. DeBoer, in an interview appearing in the July issue of *Public Power*, house organ of the national organization, we are indebted for the frank admission that tax-exempt government power "can't reach the salary scale of private power."

To make up the difference, Mr. DeBoer

## PUBLIC UTILITIES FORTNIGHTLY

complacently continues, the government power employee may enjoy the nonrent-paying compensation of civic pride. "I think a fellow has to have a sense of public service to be successful and satisfied in a public power system," he explains.

### Cost of "Sense of Public Service"

**T**HIS remark is a callous reflection on the profound sense of public service which, in times of ice and storm, keeps line crews and other workers—no matter who is the boss—to long hours of hazardous and exhausting duty to maintain the essential public service of power supply. Certainly this is a revealing display of the smug hypocrisy of public power "liberals." In a word, in addition to his thin pay envelope, the nonunion public power lineman gets a bonus of \$1,600 worth of "sense of public service"—which his union card friends get for free!

The Nebraska Public Power System, show piece of government ownership, sells "cheap" power only by virtue of exemptions attached to it as an instrument of the sovereign. Not only is it exempted from all federal taxes, but it is also exempt from that somewhat imperfect Magna Charta of organized labor, the body of federal labor laws. To organized labor one of the most ironic and most aggravating factors of the local public power labor relations situation arises from the fact that these agencies can thumb their noses at the National Labor Relations Board.

**I**N private industry union recognition and collective bargaining in good faith are mandatory on the vote of a majority

of the workers. Moreover, the law requires such elections on the showing of sufficient worker support. If these statutes were effective in this area, most public power employees would be organized today—and their wages and working conditions would not be the worst in the industry.

Exemption of public power from federal labor laws is a clear example of the similarity of the problems of organized labor and private management when confronted with the wall of sovereignty. Stemming from the same authority, the preferences to public agencies in the sale of federal electric energy and exemption from labor's federal labor laws, provide labor and management a powerful common interest. This is particularly true because only a part of the "cheapness" of public power comes from tax exemption. A very real part of the slightly higher price private power must receive is accounted for by the fact that in addition to the full tax load, the companies pay top-scale union wages—while their competitors do neither.

### Private Power Company Wages Set Standards

**I**T is small comfort to the dues-paying member of an electrical workers' union to know that the wage scales negotiated by his union with private companies serve as a standard which determines, in most instances, the lower scales established by public power.

To the extent that their wage scales are influenced by the standards set by bona fide union bargains with private management, public power employees are

## WHEN GOVERNMENT BECOMES LABOR'S BOSS

"free loaders" in much the same sense and by the same sovereign force as the tax-free beneficiaries of the preference clause. By the same token the very existence of depressed public power wage scales may handicap union negotiators in bargaining with cost-conscious private competitors nearby.

Here in Washington, municipal and public utility districts and electric co-operatives serve 60 per cent of the public. Yet wage negotiations with public power never begin until the private companies and the unions conclude their annual bargaining. The scales then set are shaved by the various public agencies according to local factors. The point is that they are always *under* the standards set by the union with private management. It is true that in the state of Washington most government power agencies tolerate union recognition. The operative word here is "tolerate." Genuine free negotiations are not possible when one party appears as a supplicant while the other negotiator is at liberty to bestow or withhold as he sees fit.

For all of these reasons it should be amply clear that organized electric utility workers have strong cause to fear and to oppose the spread of government ownership. Over more than a decade, spokesmen for affected locals of the IBEW and other unions have repeatedly appeared before legislative and appropriating committees of Congress in opposition to every important proposal to extend the scope of federal power operations.

### Labor Unions Support Private Power

OUT here in the Pacific Northwest we have recently succeeded in winning

wide sympathetic understanding and support of many other union organizations not directly affected by our problem. This was evidenced a year ago when the U. S. Senate Interior Committee held hearings in the region on two pending bills which revolved on the issue of whether the pressure lobby of public power could stop, by federal legislation, construction of the largest dam ever proposed by private enterprise, High Mountain Sheep on the Snake river. The eighteen IBEW witnesses favoring private development, plus a statement by a local of another electric workers' union, represented total coverage from that source, as might have been expected. More significant, perhaps, was the assistance from 13 additional union locals of the region, representing a broad cross section of organized labor opinion. Even more heartening was a joint statement signed and submitted by a total of 20 local, statewide, and regional groups of all descriptions. One lone witness who professed to speak in favor of public power for his own labor organization was repudiated by it by telegram while he was still in the hearing chamber. Note! The bill died in committee.

As recently as last August 1st, reversal of its traditional public power stand by the Oregon AFL-CIO at its biennial convention was a highly indicative sign of the trend on the broad front of organized labor. On the issue of continued endorsement of a proposal to put the state in the utility business by a power authority type of state power commission, the convention withdrew its previous support and resolved neither to sponsor nor support such legislation. When the issue was

## PUBLIC UTILITIES FORTNIGHTLY

fully understood, the Oregon house of labor came to our support.

### Nationalization and Freedom Are Incompatible

**I**N conclusion, I think it pertinent to explain why I have apparently ignored the socialistic aspects of the problem since government ownership is the very keystone of Marxist dogma. In a country where Socialism can be a political dirty word to the very leaders who—frequently from sincere misconceptions—advocate socialistic practices, it seems to me that the immediate point of attack should first be the pragmatic test of whether such practices provide a system superior to private enterprise. On that basis it is evident that the government-produced product may appear to be cheaper—if often less reliable—only because of exemptions of the sovereign which permit depressed wage scales and a wide gap of tax avoidance. Exercise of such exemptions in employment of and in competition with the citizen constitutes a self-evident misuse of authority.

Experience has proved that government ownership is only an elaborate, costly, and stupid method of robbing the taxpayer Peter to pay power-using Paul—who would be one and the same person in the event of total socialization of the industry.

**H**OWEVER, I should like to point out that all of these considerations only demonstrate the economic and antisocial weaknesses of socialistic practices as an instrument of state policy. I have cited them to illustrate the grave danger to the

national economic and political security that would result from partial or total government ownership of such a basic industry as electric energy—a fundamental tenet of imported state Socialism.

It should be understood that socialistic doctrine comes in two parts: first, nationalization of the means of production; second, use the fruits of nationalized production for improvement of the general welfare. Socialism has no monopoly on the general welfare objective which is, in fact, imbedded in our Constitution as one of the essential purposes of the union of our states. After nearly two centuries, the constitutional free enterprise system has proved to be the true horn of plenty which supports a higher standard of life and general welfare than any alternative yet conceived.

**N**ATIONALIZATION of industry is the chief identifying feature of Socialism. That kind of Marxism is in full retreat among the democracies of Europe. Germany, birthplace of this obsolete doctrine, is now rapidly disposing of its vast nationalized holdings to private ownership. Britain has had its own disillusionment.

Democracies have learned from trial and error that nationalization is not compatible with freedom. It thrives best at pistol point in a police state. In the race for supremacy and even survival between the free and the socialized worlds, can we afford to weaken our free enterprise economy by fastening the dead hand of state Socialism on so basic an industry as electric energy? Do we or don't we believe that our own American system is best?

# Should Philadelphia Transit Go Municipal?



By WILLIAM J. MCKENNA\*

The author raises some serious doubts about the wisdom of the city of Philadelphia taking over its privately owned transportation system. He points out the manifold pitfalls of municipal ownership and the experience in other cities. He contends the idea of city operation of the Philadelphia Transportation Company is largely the mayor's and was born of desperation in the hope it could solve the problems that perplex private management. A positive program of co-operation by the city with the transit company is urged, including the granting of more adequate rates.

DURING the past several years Richardson Dilworth, mayor of Philadelphia, has conducted a campaign to secure municipal ownership of the Philadelphia Transportation Company. He has been assisted in this campaign by a small but vocal group of city officials, and such quasi-public agencies as the Urban Traffic and Transportation Board. Mayor Dilworth and his supporters are convinced that city ownership of the PTC is necessary in order to secure an integrated transit system for Philadelphia and the surrounding counties.

Contrary to the situation that has occurred in several other cities of the United

\*Assistant professor of economics, Temple University. For additional personal note, see "Pages with the Editors."

States, the initiative for municipal ownership of the transit system has not come from the transit company itself. In fact, the PTC has displayed reluctance to sell to the city. It has sought to improve the transit by a \$66 million program of modernization, by increasing its operating efficiency, and by a shift from costly trolley service to buses.

THE city of Philadelphia, however, has pursued a policy of harassment of the PTC by compelling the company to undergo prolonged and expensive rate hearings, by a series of court litigations, and by a generally unsympathetic policy that has adversely affected the future planning of the PTC, unsettled its labor

## PUBLIC UTILITIES FORTNIGHTLY

negotiations, and resulted in financial attrition of the company. At the same time, the city of Philadelphia has criticized the PTC for alleged service inadequacies, excessive rate base and rate of return, and unacceptable financial practices.

In addition, the city has compelled the company to continue to subsidize the transportation of school children at a cost much greater than the 7½-cent fare per pupil. This school subsidy, which even the municipally owned New York Transit System has shifted to the city as an education cost, now exceeds \$2.6 million yearly for the transportation of over 22 million school children.

### Dispute over Purchase Price

FOR some years Mayor Dilworth has insisted that the city would pay no more than \$50 million for the PTC. Realizing that such a figure would never lead to the attainment of his goal of municipal ownership, he early last year offered to pay \$75 million for the system. The PTC, while not eager to sell to the city, expressed a willingness to study the offer. The mayor, however, later lowered the \$75 million figure to a maximum of \$62 million. This is a figure far below the approximate \$100 million which the PTC maintains is the true worth of its properties.

The city of Philadelphia has legal authority to acquire the PTC through the exercise of a purchase option originally incorporated in the 1907 agreement with the preceding company, the Philadelphia Rapid Transit Company, which became bankrupt in 1934. The city is, however, unwilling to accept this agreement as the basis of determining the price the city

should pay for the transit system. It is not willing to undergo the three or four years of litigation in the courts which would be inevitable if the city were to insist upon its purchase price of \$62 million. This in itself is an admission by the city that it is not concerned with equity in its effort to force municipal ownership of the PTC, but is interested in forcing the transit company to accept a depressed price for its facilities. Not only is this policy of the city of Philadelphia contrary to the American principle of a fair price for private property acquired by a public body, but it is also arbitrary and capricious.

**G**OVERNMENT planners are inclined to be impatient. They are convinced that they alone know what is good for the public. Those who urge caution and the observance of legal rights of all parties involved are criticized as reactionary, blind to the public interest, and concerned only with property rights. This attitude, if it became the basis of governmental action, would destroy the protection of property rights which is a fundamental principle of the American constitutional system.

If the city of Philadelphia wishes to obtain the ownership of the PTC system, then there is a basis provided by law for such acquisition. But the case against such municipal ownership is a strong one and should receive the attention of not only the citizens of Philadelphia and its surrounding counties, but of the public generally.

**The Case against Municipal Ownership**  
**T**HE following observations are offered as cautions against any hasty pro-

## SHOULD PHILADELPHIA TRANSIT GO MUNICIPAL?

gram of municipal ownership of the Philadelphia Transportation Company. They also have force in other cities' campaigns for municipal ownership. These observations include:

**1. ABSENCE of Public Demand for Municipal Ownership.** The demand for municipal ownership of the PTC did not originate from a ground swell of the citizens of that city. It has resulted from an insistent campaign by the mayor, who has argued untiringly and impatiently for such municipal ownership. He has not only failed to secure the prior consent of the city council for such a policy, but he has in fact gone ahead in the face of the opposition of such prominent city council members as Victor E. Moore and James H. J. Tate. As long ago as 1956 Councilman Moore stated that

If we try to drive the PTC out of business we will pile up millions in debt, and possibly lead to curtailment of our programs for highways, health, police protection, parks, and welfare.

The public itself has evinced only apathy toward the question of city ownership of the PTC. Unless there exists a strong public demand for municipal ownership of a transit system, and a public attitude sympathetic toward such ownership, any policy of public ownership of the PTC would be of doubtful success. The constant repetition of Mayor Dilworth's demand for municipal ownership of the PTC is not tantamount to a public demand for such ownership.

**2. THE Fare Policy.** The basic fare in Philadelphia is 20 cents, and has

been 20 cents for several years (except for school children who have been carried for 7½-cent fare since it was adopted in 1948). The city has opposed any fare increase, including the school fare, for several years. This opposition to a fare increase has occurred in the face of major increases in the cost of rendering transit service, and in the face of the existence of a basic 25-cent fare in most of the major cities of the country, including some municipally owned. The city of Philadelphia itself has increased its city income tax and other taxes in recent years because of the increased costs of municipal services.

It is the stated policy of the proponents of municipal ownership of private transit systems (for example, New York city) that fares should not necessarily be geared to the total costs of transit service, but should be based upon what the rider can afford or is willing to pay. Any transit rate policy which is based upon what the city administration believes the rider can afford or is willing to pay is likely to be one which, in actuality, will result in unprofitable fare structure. The losses in



## PUBLIC UTILITIES FORTNIGHTLY

such cases will be shifted to the nonrider in the form of the absorption of the losses by higher taxes. In the case of Philadelphia, which taxes the income of nonresidents who work in Philadelphia, a portion of such a transit subsidy will be borne by them even though they will have no voice in the acquisition of the PTC by the city or its subsequent operation.

**3. RECORD of Municipal Ownership of Urban Transportation Systems.** The past record of municipally owned transit systems has not lived up to the extravagant expectations of its advocates. Not only have there been operating losses, but there have also been huge capital subsidies by the general taxpayer. It may not be that municipal ownership *per se* will always be fraught with difficulties, but experience has shown that the policies pursued under municipal ownership have greatly contributed to the operating and capital subsidies of such ownership. In those few cases where municipal ownership of a transit system has been profitable there has been a policy of raising fares as costs increase. But, in these cases, the fares have been increased without the long delays imposed by regulatory agencies on private transit companies.

If private transit companies could raise their rates on the same basis as these few successful, municipally operated systems, then the absence of a cost-rate lag would have made profitable operation possible in many cases. This would have been especially true in the case of the PTC which has been compelled to undergo repeated long suspensions and costly hearings in almost all its rate increase applications since 1945. Even when a rate increase is

granted to a private transit company, the added future revenue does not contribute to the increasing costs that have been incurred during the six to nine months of hearings before the regulatory commission.

**4. TREND in Traffic.** In almost all cities of the United States there has been a decline of transit traffic. The factors leading to this decline include: decentralization of industry, growth of the suburbs, and, most important of all, the mass use of the private automobile. Municipally owned transit systems have not been immune to the traffic decline. But recent trends have indicated that, at long last, there may be an end to this decline. A return to public transit has occurred in several major cities, and in many others the decline has leveled off. The city streets have been saturated with the private automobile. The convenience and economy of public transit services are becoming increasingly evident. With adequate fares the private transit companies could encourage this returning trend by improved facilities and service.

**5. ADEQUACY of Service.** No private or publicly owned transit system can satisfy everyone at all times. The use of public transportation is affected by weather, emergencies, and peak-riding habits. Yet service records of private transit companies do not stand still. There is either a record of marked improvement or marked deterioration of service. There is no assurance that municipal ownership will provide better transit service. And there is always the danger that the extension of transit service under municipal ownership will be geared to political con-

## SHOULD PHILADELPHIA TRANSIT GO MUNICIPAL?



siderations rather than to a basic need of such service.

**6. SUBSIDIES.** There is little doubt that sooner or later municipal ownership of the PTC would result in substantial public subsidies. Then, the taxpayers as a whole, and not the transit rider, will bear the taxes needed to meet these subsidies. The actual surpluses of such municipal ownership are likely to be illusory and short-lived. The costs of transit services will not be less under municipal ownership. The absence of the competitive force of private management will result in a tendency to less resistance to cost increases than occurs under private management.

**7. ILL of the Transit Industry.** The ills of the transit industry have been nation-wide in character. No transfer of ownership of the transit facilities will suddenly reverse this fact. No magic formula for successful operation of urban transit is held by any municipal government. Given co-operation of the municipal authorities, instead of a policy of opposition, private ownership of urban transit

can be successful. If the public utility commission of Pennsylvania were alert to changing costs and sensitive to the need of private transit to make a fair profit, the PTC could be assured of compensatory fares and would be able to provide better service to the public. This is a transit experiment that by all means should be tried in place of the negative policy of defeatism and public ownership.

**8. LABOR Problems.** Urban transit has been compelled to seek labor economies because labor constitutes 60 to 65 per cent of operating costs. This is the case even in the face of labor replacement resulting from the decline of traffic, the shift from trolleys, and general operating economies. The contemplated city ownership of the PTC would not solve the complicated labor problems and labor relations of this company. These problems would become more acute under city ownership. There would be greater pressure to resist labor operating economies. City ownership would also involve the assumption by the city of a funded pension system of many millions of dollars.

In addition, the city would be sub-

## PUBLIC UTILITIES FORTNIGHTLY

jected, as is the PTC, to the same or even greater demands for wage increases and other employee benefits. In other words, labor costs and labor problems do not vanish with city ownership of transit facilities. Labor itself may find that the status of city employees is not all milk and honey. It is an illusion, as hundreds of thousands of governmental employees realize, that employment by the government is an automatic guaranty of wages and other benefits equal to those under private management.

**9. MANAGEMENT and Managerial Policies.** At present the PTC management determines the operating, financial, and other policies of its system. Under city ownership, even if the PTC is leased to private management on a fee basis, the control of management policies will be in the hands of the city or its agency. If an operating, financial, or service policy should conflict with that of the city administration, the transit service may be unprofitable. Determination of policies on a political basis is always a possibility. The present management of the PTC has pursued cost control policies which have been opposed in part by the city of Philadelphia and these policies would scarcely be continued if there were city ownership.

**10. PURCHASE Price.** There already exists a disagreement as to the price to be paid for the acquisition of the PTC. This disagreement is bound to result in long and costly litigation. Even if the city and the PTC should agree on a sale price, there is a strong doubt that the present financial and tax difficulties of

Philadelphia will make possible the purchase of the system. The contention that such a purchase would be self-liquidating in character is open to question in view of the current losses of the PTC and the possibility of continued losses under city control.

**11. JUSTIFICATION of Municipal Ownership.** The chief justification for the ownership of an essential public transit service by a city is that private management cannot possibly operate the transit system at a profit and as a result the public interest will suffer. There is no evidence that the PTC is not capable of profitable operation if the rates were adequate and the full co-operation of the city were given.

The ownership of the PTC by the city of Philadelphia seems to be a solution conceived in despair with a hope and a prayer that somehow municipal ownership of itself will solve the complex problems that perplex private management.

There are those who, whenever difficulties arise in an essential public service rendered by private management, say "let the government do it." But the real difficulty may be the action of the government itself in its policy of constant harassment of the private management. This contributes to the great illusion of our time: that somehow government can run everything better than anyone else. This surely has not been proven in the case of municipal transit services.

If the city would adopt a positive program of co-operation with the PTC in an effort to solve the present transit problems, the city, the transit company, and the riders would all profit.

# The Problem of "Double Accrual" of Property Taxes of Public Utilities



By ERIC SCHENKER\*

Some regulatory commissions today are using tax accruals as an offset for working capital claims in rate cases. A decision which would resolve the administrative stare decisis created by the Internal Revenue Service in connection with double accrual deductions from federal income taxes might have some regulatory significance. Double accrual deductions have resulted in some instances where states have changed their property tax due dates. After first permitting such deductions to be made, Congress and the Internal Revenue Service are now reconsidering the matter. And the question has been raised as to the effect on returns already filed.

**M**ICHIGAN STATUTES ANNOTATED, 1958, § 7.2 reads in part as follows:

The taxable status of persons and real property after January 1, 1958, shall be determined as of December 31, 1958, and each December 31st thereafter, which shall be deemed the tax day, any provisions in the charter of

any city or village to the contrary notwithstanding.<sup>1</sup>

Section 13 of the General Property Tax Law relating to personal property was likewise amended so as to contain the same language as above quoted. The 1958 act also amended § 40 of the General Tax Law to read as follows:

Notwithstanding any provisions in the charter of any city or village to

\*Assistant professor of economics, The University of Wisconsin, Milwaukee, Wisconsin. For additional personal note, see "Pages with the Editors."

<sup>1</sup> Michigan Statutes Annotated, 1958, §7.2.

## PUBLIC UTILITIES FORTNIGHTLY

the contrary, all taxes shall become a debt due to the township, city, village, and county from the owner or person otherwise to be assessed on the tax day provided for in §§ 2 and 13 of this act, and the amounts assessed on any interest in real property shall, on the first day of December, for state, county, village, or township taxes or upon such day as may be heretofore or hereafter provided by charter of a city or village, become a lien upon such real property, and the lien for such amounts, and for all interest and charges thereon, shall continue until payment thereof . . . And all personal taxes hereafter levied or assessed shall also be a first lien, prior, superior, and paramount, on all personal property of such persons so assessed from and after the first day of December in each year for state, county, village, or township taxes or upon such day as may be heretofore or hereafter provided by charter of a city or village, and so remain until paid . . .<sup>2</sup>

THE purpose of this article is to explain how the "double accrual" of property taxes and the administrative stare decisus of the Internal Revenue Service have caused unnecessary uncertainty. Before this problem can be presented in its proper perspective, I must be certain that the readers have an understanding of the basic principles pertaining to the accrual system of accounting.

The Internal Revenue Act of 1954 recognizes two basic methods of accounting—the cash receipts and disbursements method and the accrual basis system. Under the accrual system of accounting,

entries are made in the books when the item to be accounted for becomes a liability:

The basic idea under the accrual system of accounting is that the books shall immediately reflect obligations and expenses definitely incurred and income definitely earned without regard to whether payment is due. Expenses incurred in the operations for a particular year are properly accrued in the accounts for that year. Under the accrual system, the word "accrued" does not signify that the item is due in the sense of being then payable. On the contrary, the accrual system wholly disregards due dates. Neither is it necessary that the amount of an incurred liability be accurately ascertained in order to accrue it.<sup>3</sup>

THE cash receipts and disbursements accounting method basically differs from the accrual system in that entries are made at different times. An example will serve to clarify the resulting difference in the two methods. Let us assume that two firms, one employing the cash system and the other the accrual system, each owe the state \$100,000 in property taxes. The tax was assessed on the first day of January. The books of the two firms would appear:

### CASH RECEIPTS AND DISBURSEMENTS METHOD

	Taxes Due	Taxes Paid (Expenses)
January 1 . . . . .	\$0.00	\$0.00

### ACCRUAL SYSTEM

	Taxes Due	Taxes Paid (Expenses)
January 1 . . . . .	\$100,000	\$100,000

<sup>2</sup> "General Counsel's Memoranda 6273," *Cumulative Bulletin VIII*, Government Printing Office, Washington, D. C.

<sup>3</sup> *Ibid.*, §40.

## THE PROBLEM OF "DOUBLE ACCRUAL" OF PROPERTY TAXES

It will be noticed that the company under the cash basis system has not entered any amount on its books, while the other company has entered a liability of \$100,000 in taxes. To the firm with the entry (accrual system), the tax constituted a liability and an expense for the month of January. In the cash basis books, no expense was recorded; but, in June, the company under the cash system paid \$50,000 of the tax. Now its books read:

	Taxes Due	Taxes Paid
June .....	\$50,000	\$50,000

The payment of \$50,000 in taxes is entered as an expense for the month of June; however, the tax was assessed and constituted a liability on January 1st. It is apparent that the accrual system of accounting gives a more accurate reflection of the amount of the expense and the time that it became an expense.

APPLYING the above situation to determine the deductibility of a tax from the gross income, some difficulties could arise. To further complicate the matter, let us assume that the company under

the cash receipts and disbursements method of accounting did not complete payment of the \$100,000 tax assessment until the following year. The allowed deduction of taxes on the federal income tax return for the two companies would be different.

### CASH RECEIPTS AND DISBURSEMENTS METHOD

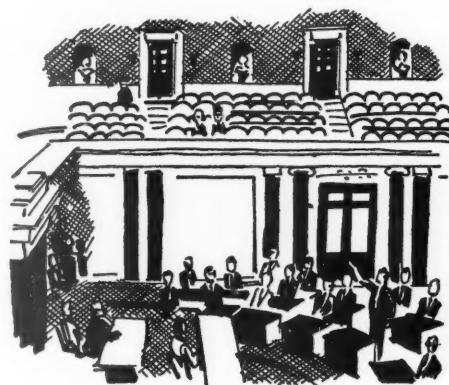
Deduction of Taxes <i>As Such</i> .....	\$ 50,000
ACCRUAL SYSTEM	

Deduction of Taxes *As Such* .....

\$100,000

The firm employing the accrual method of accounting is allowed twice the deduction that the firm using the cash method is allowed. It hardly seems appropriate that one company is allowed two times the deduction that another is allowed when the amount of their taxes was the same. The Internal Revenue Department rules, however, that this is fair. The reasoning used in arriving at such a decision is: ". . . a tax is deductible in the taxable year it was 'paid or accrued' depending upon whether the taxpayer is on the cash or accrual basis."<sup>4</sup> The firm under the cash method of accounting paid only \$50,000 in taxes in the year that it

<sup>4</sup> Prentice Hall "Federal Taxes 1959," Volume II, Paragraph 13,165 (New York, 1958).



## PUBLIC UTILITIES FORTNIGHTLY

was assessed; therefore, under the rule, it is allowed only that much deduction.

(13,118) *Cash Basis*.—A taxpayer on the cash basis can deduct only taxes paid during the taxable year.<sup>5</sup>

The company under the accrual method was allowed a \$100,000 deduction because its expense was recorded and treated as such for the month of January in the taxable year. The resulting difference in the method of accounting was the allowed deduction of the federal income tax return.

PROCEEDING to our problem, which is the "double accrual" of taxes, the necessity for the above discussions is readily seen. "Double accrual" of taxes is a deduction of two years' state taxes on one year's federal income tax return. It is a unique and peculiar situation which is possible only once for the taxpayers of a state.

The instance of a "double accrual" deduction comes about by the change of a date of assessment, day of accrual, or tax day of a state. Not all changes of this date necessarily mean a double accrual deduction.

(13,129) *Double Accrual*.—A state law shifting the accrual date or making some other change sometimes results in a double accrual.<sup>6</sup>

A DISCUSSION of the latest instance that the double accrual came to the fore will clarify the meaning and consequences of the problem. In 1958, the Michigan state legislature enacted a bill which

changed the day of assessment for Michigan state property taxes from the first day of January of each year to the thirty-first day of December of each year. December 31st was also declared to be the date on which the tax constituted a lien against the property. This definitely created a liability for the taxpayer. This change in the tax day in Michigan created a double accrual of taxes for the year 1958. To those taxpayers who were to pay the tax or have it as an expense for the year 1958, a large deduction was allowed on their 1958 federal income tax return. Not all taxpayers were allowed the deduction. Only those who were caused an expense or who actually paid the tax during the year were allowed the deduction.

REFERRING to the example of the two firms with different accounting methods (pages 92 and 93), let us see how the double system of accounting would give them an expense of two years' taxes automatically.

(13,121) *Accrual Basis*.—The general rule is that a tax accrues when all the events have occurred which fix the amount of the tax and determine the liability of the taxpayer to pay it.<sup>7</sup>

The question is, when was the liability created? Another change in the Michigan law clearly states that the liability is created on the date of assessment:

. . . Upon such day (the assessment day) . . . become a lien upon such real property.<sup>8</sup>

<sup>5</sup> *Ibid.*, Paragraph 13,118.

<sup>6</sup> *Ibid.*, Paragraph 13,129.

<sup>7</sup> *Michigan Statutes Annotated*, 1958, §7.2.

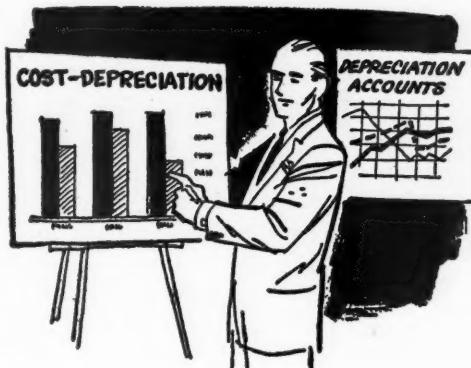
## THE PROBLEM OF "DOUBLE ACCRUAL" OF PROPERTY TAXES

WITHOUT doubt, then, the liability of the tax fell upon the taxpayer on the day of assessment—in this case December 31, 1958. Following the rule of the accrual method of accounting, the tax was not only a liability, but also an expense. Accordingly, it was entered as an expense for the month of December, 1958, and is part of the tax year 1958 for federal income tax purposes. It follows that it is an allowable deduction for the federal income tax return. Another question arises, will the federal government allow such a deduction, considering the fact that in the overall picture millions of dollars in revenue are lost? The answer to this question up to a few weeks ago was "yes." Referring to paragraphs 1800, 1801, 1802, and 1910 of the "Federal Tax Handbook" of 1958, it is found that this deduction satisfies the requirements of the Internal Revenue Act of 1954, since it is being deducted as a tax.<sup>9</sup>

Congress and the Internal Revenue Service are currently reconsidering the double deduction issue. Section 3 of HR 9625 and Technical Information Release No. 214 of the IRS both provide that the property tax deduction for income tax purposes shall be limited to a single year's amount. Whether or not these pronouncements will have any effect on returns already filed appears to be uncertain.

RETURNING to the company under the cash receipts and disbursements method of accounting, we discover that it may or may not be allowed to deduct the two years' taxes of Michigan from its federal income tax return for 1958.

<sup>9</sup> "Federal Tax Handbook" 1958, Paragraphs 1800, 1801, 1802, and 1910. Prentice-Hall, Inc. (Englewood Cliffs, New Jersey, 1957).



If this firm paid the taxes for both years in 1958, it is entitled to the double deduction; but this is not an automatic deduction as it was for the company under the accrual system. The amount of the deduction is determined by the amount of the tax that was actually paid during the tax year 1958.

The state of Michigan was not the first state to make a change that caused a double accrual deduction. Previously, Illinois, Ohio, Nebraska, and Rhode Island had passed laws which caused double accrual deductions. When, in 1958, the situation arose in Michigan, no revenue ruling was made. Silence was maintained by both the tax courts and the Internal Revenue Department which indicated approval of the deduction in view of previous rulings on the subject. Precedent was followed, and a type of administrative stare decisis was created.

THE public service commissions of states whose legislatures created the double accrual for the property taxes problem were contacted and their replies are summarized below.

The public utilities commission of Ohio stated:

## PUBLIC UTILITIES FORTNIGHTLY

The 1959 session of the Ohio legislature amended § 5727.07 (amended Senate Bill 182) to make December 31st the uniform listing date for the payment of taxes on assessable property of the public utilities. The text of the enactment reads as follows:

The property of public utilities to be assessed by the tax commissioner shall be all of the property thereof, as defined in § 5727.06 of the Revised Code, owned or operated, on the thirty-first day of December, annually, and commencing with the tax year 1960 and each year thereafter, the lien of the state for taxes levied on such property shall attach thereto on the thirty-first day of December next preceding.

The commission has not yet decided any rate case in which the date certain or accounting test period was sufficiently recent to make the enactment pertinent.

However, it has been announced in the tax services that the Internal Revenue Service is preparing a ruling disallowing the "double accrual."

The 1959 annual reports of Ohio public utilities indicate that some are setting up deferred credit accounts to provide for the federal income tax savings. In view of the action of the Internal Revenue Service, entries will have to be made to eliminate the tax deferral (or savings) that did not materialize.<sup>10</sup>

THE public service commission of Michigan stated:

<sup>10</sup> Letter from the Ohio Public Utilities Commission to author, dated April 19, 1960.

Some variations exist among the accounting entries used by the utility companies which took advantage of double deduction. I do not recall any companies which credited taxes payable, but one or two companies did credit the accrued taxes account.

The commission has not had before it, since passage of the law, a rate case in which this issue was involved, so we have taken no official position on the matter. In making its presentations in rate cases, the commission's technical staff customarily uses accrued taxes as an offset against materials and supplies and cash working capital in arriving at its conclusion regarding the appropriate allowance for working capital. In this way, it is reasonable to expect that any added accrual of taxes would receive proper recognition.<sup>11</sup>

THE state railway commission of Nebraska stated:

The Nebraska legislature changed the date of the assessment from March 1st to January 1st. This in no way changed the date that the taxes are due.

The companies under the jurisdiction of this commission accrue their taxes from one due date to the next due date. If the amount accrued is not correct, there is an adjustment made through the tax accrued account to clear out this account.

The telephone companies in Nebraska are the only public utilities in Nebraska in which a rate base is used in establishing rates. The natural gas companies and the electric companies

<sup>11</sup> Letter from the Michigan Public Service Commission to author, dated April 1, 1960.

## THE PROBLEM OF "DOUBLE ACCRUAL" OF PROPERTY TAXES

are public utilities but are not considered common carriers, therefore this commission does not regulate their rates.<sup>12</sup>

THE Illinois Commerce Commission stated:

... be advised that §§ 509 and 511 of Chapter 120 of the Smith-Hurd Annotated Revised Statutes changed the date for assessment of real estate taxes from April 1st to January 1st. This is to be effective for the tax year 1960.

Since the state of Illinois is not forgiving taxes, we do not see where this will be a windfall to the utilities. Since

the changeover is to be effective next January 1st, there may be some further developments.<sup>13</sup>

THE double accrual deduction legal status is currently being reconsidered by Congress and the Internal Revenue Service. It should be obvious from this discussion that states changed their tax due date not as a source of revenue since most taxpayers do not pay their taxes the instant they are assessed. The administrative stare decisis of the Internal Revenue Service has caused unnecessary doubts on the effects on returns already filed, but a definite decision at this point can save many problems and inequities in the future.

<sup>12</sup> Letter from the Nebraska State Railway Commission to author, dated April 4, 1960.

<sup>13</sup> Letter from the Illinois Commerce Commission to author, dated April 7, 1960.

"WHAT makes America grow that's different from Russia? Economists say that it is self-interest—the self-interest of people—in final analysis, the self-interest of the individual.

"Growth rests on our hopes for a better future, a brighter tomorrow. And on our optimism that we can make these hopes come true. Maybe this future is a week away, a year away, or a decade.

"So we put money in banks. We invest. Instead of using the money right away, we save. Business does the same thing. Because by saving and investing we hope to build a future and meet future needs.

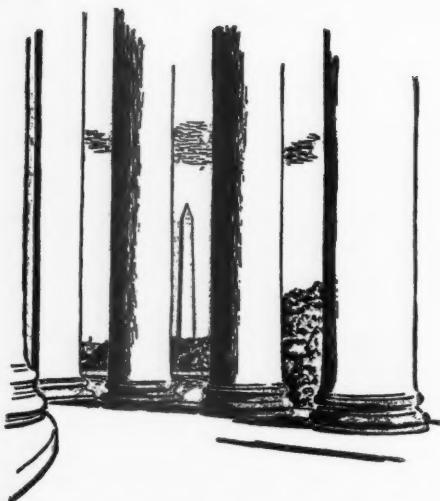
"The results of all this savings and investing we can see in our own community. The results show up when a new plant is built, an office building goes up, or a shopping center appears. The results let people live better and work better. The total result—the most prosperous nation in the world with the best health care in the world—America. . . .

"This is the principal difference between the way America grows and the way Russia grows. The Russian people do not have freedom. They do not decide their own future. The superstate does. The investments—raised wholly by confiscatory taxes—are state investments, not individual investments. The consumer is largely ignored.

"The Russian government has wholly taken over the determination of the growth of Russia. The people's freedom has been curtailed."

—EDITORIAL STATEMENT,

Chamber of Commerce of the United States.



### *How Much New Law Does Landis Want?*

**I**N the course of analysis of the snappy little 87-page report by James M. Landis on what is wrong with the federal regulatory agencies, some questions have arisen as to just how much new legislation will be needed to put his recommendations into effect. A good deal of the "reform" Landis has requested could be put into effect by commission rule making or presidential order.

For example, the proposed uniform canon of ethics to govern the conduct of the commissioners and their staffs could be agreed upon by the commissioners or decided upon at a higher level and then promulgated by Executive Order. Landis himself suggests this (on the last page of his report). This could take in a number of things found objectionable, such as undesirable honorariums and other "benefits" which might be derived from official status, knowledge, or information. Likewise, *ex parte* contacts. The actual establishment of the four "coordinators" (communications, energy, transportation, and Landis' own job of "Overseer" of the regulatory agencies)

## Washington and the Utilities

is likewise proposed to be set up within the Office of the Chief Executive by order of the President. President-elect Kennedy needs no legislation from Congress to make such changes within his own secretariat, so to speak.

**I**NDEED, when we sift through all of the sixteen proposals set forth in the Landis report, we see three rather broad but indefinite proposals for acts of Congress.

They are indefinite because, following the first New Deal procedure, they ask for blank checks rather than specific legislation. These are:

1. A new law giving the President authority (for two to four years) to propose reorganization plans, subject to veto by concurrent resolution of Congress.
2. A law to give the President power to pick the chairman of the Interstate Commerce Commission, to serve at his pleasure.
3. The same law with respect to the chairman of the Federal Power Commission.

## WASHINGTON AND THE UTILITIES

WITHIN such broad powers, the President could undoubtedly carry out the other reorganization proposals, such as the delegation of administrative control to the chairmen of the respective commissions, boosting the pay and tenure of commissioners, the setting up of panels, increasing the powers of hearing examiners, and the curtailment of automatic appeals. Some of these changes could even be made under the rule-making authority of the commissioners themselves. Changes in procedural requirements have often been made by rule.

In any event, with or without congressional authority, President Kennedy should be able to gain eventual approval and establishment of most of the fairly noncontroversial proposals which have been hanging around Washington for years waiting for adoption in some form or another. These include the following specific changes from the present setup:

1. Increase the powers of commission examiners and cut down the right of automatic appeals.
2. Place greater responsibilities on individual commissioners for opinion writing, instead of routine opinion writing machinery at the staff level.
3. Cut out procedural red tape, informal contacts, and "lobbying" by all parties concerned in regulatory cases and generally lower the cost of regulatory cases for parties involved in them.
4. Establish a continuous advisory conference on regulatory procedures to inform Congress, the commissions, or anybody else working with the commissions, how the ideals of justice and due process can be preserved with the least amount of delay, red tape, and legalistic formality, etc. (This has already been started under Eisenhower's "Prettyman Committee.")
5. Delegate to individual commission-

ers, panels, examiners, etc., *final* authority to dispose of cases, subject only to a *discretionary* review by the whole commission.

### No Czar but Plenty of Co-ordination

LANDIS has insisted that he does not want to be a "czar," and has proposed none for the regulatory agencies. He says he wants speed, co-ordination, more orderly procedure, and all that sort of thing—but no "czar." Yet, what will happen when Landis, as the President's "Overseer," sits down to preside over a conference of the chairmen of the various agencies—all holding their jobs "at the pleasure of the President"? Will he confine his supervisory rôle to checking up on case loads, or procedural matters? Or will he inevitably transmit policy-making views of the President? A realistic appraisal suggests that the latter development could hardly be avoided. And a reading of the Landis report itself suggests the same thing.

At page 32 of the report, Landis has this to say about the failure of the FPC to keep down gas rates, and his reference to the "technically independent" commission is hardly with a reverential spirit:

There is an obvious necessity for the President to keep abreast of such national policies as may or may not be in the making or the handling or failure to handle national problems of national impact. He has also the constitutional duty to see that the laws are faithfully executed and this duty is applicable to the execution of laws entrusted to regulatory agencies, whether technically "independent" or not. The patent failure of the Federal Power Commission to execute the laws relating to natural gas production is thus rightly a matter of constitutional

## PUBLIC UTILITIES FORTNIGHTLY

concern to him. As to this failure the circuit court of appeals of the District of Columbia recently on December 8, 1960, had this to say:

We believe that the Supreme Court (in the Catco case) meant to impress upon the commission an interpretation of the "public interest" which, in the context of a rising natural gas market, demands a real administrative effort to hold back prices. We find nothing in the record before us which would justify the conclusion that the commission had adequately performed this duty.

Whether such failure adequately to perform a statutory duty would be "cause" for removal is a question as to which lawyers might argue but which from the practical governmental standpoint permits of only one answer.

### *The House Subcommittee Report*

**I**N the furore over the Landis report, comparatively little attention has been given to the staff report of a congressional subcommittee which has given three years of its time to this subject—the Harris Subcommittee on Legislative Oversight. This has already gone out of business this month, according to its chairman, Representative Harris (Democrat, Arkansas). But it is a safe bet that Congress will pay at least as much attention to the 263-page subcommittee staff report (submitted little more than a week previous) as it will to the Landis report.

The Harris subcommittee staff report has been criticized by members because it was not submitted to the full subcommittee membership for review. Chairman

Harris has promised a report by the full subcommittee. Here are some of the proposals in the staff report:

The committee staff recommended that any air carrier, officer, agent, employee, or representative found guilty of willfully and knowingly violating air safety regulations be fined up to \$10,000 or jailed up to five years, or both.

It urged that any air carrier party to a formal proceeding before the Civil Aeronautics Board be allowed to charge not more than 25 per cent of the cost of those proceedings to subsidy.

And it recommended that Congress scrutinize the practice of allowing gas companies to include legal fees in their cost of service.

**U**RGING generally tighter federal regulation of broadcasting, airlines, railroads, truck lines, and natural gas companies, the staff report suggested:

Licensing or regulation of broadcasting networks.

Prohibiting the trafficking in broadcast licenses.

More careful regulation of the manner in which cities, states, the federal government, and members of Congress may participate in formal air-line cases.

The character, as well as the fitness, of motor carrier applicants should be considered by the Interstate Commerce Commission in granting operating permits.

A study by the Federal Power Commission to see if the refunds it orders actually reach natural gas consumers.

### *The Electric Industry Enters The Sixties*

**S**HERMAN R. KNAPP, president of the Edison Electric Institute and presi-

## WASHINGTON AND THE UTILITIES

dent of the Connecticut Light & Power Company, noted in a year-end statement that during 1960, a year in which the American economy as a whole followed a somewhat uneven path, the electric utility industry continued its record-making growth, substantially advancing toward the level of power-producing capability expected by the end of the decade.

By 1970, investor-owned electric companies plan to have doubled their present capability and their production, Knapp said. By 1980, they expect both capability and production to be nearly quadrupled.

According to preliminary figures, electric energy output (including imports from Canada) by the total electric utility industry in the contiguous United States (*i. e.*, exclusive of Alaska and Hawaii) is estimated to have reached a record high of 764.8 billion kilowatt-hours during 1960, an expected increase of some 45.3 billion kilowatt-hours, or 6.3 per cent over 1959.

With the addition of the electricity generated by industrial plants and by railways not contributing to the public supply, and of generation in Alaska and Hawaii, the United States' output is expected to have reached a record total of 850 billion kilowatt-hours in 1960.

Production of electricity within the United States (including Alaska and Hawaii and excluding imports) reached a record high of 845 billion kilowatt-hours.

**I**N December, 1960, the power-producing capability of the electric industry in the contiguous United States is estimated to have reached a new high of 175.9 million kilowatts. This was an increase of 12.6 million kilowatts, or 7.7 per cent, over the 1959 figure of 163.3 million kilowatts. Of the industry's total of 175.9 million kilowatts of capability, 134 mil-

lion kilowatts, or 76.2 per cent, were provided by investor-owned companies. The remaining 41.9 million kilowatts, 23.8 per cent of the total, were provided by government-owned or government-financed power agencies.

The nation's total electric-generating capability, including railway and industrial plants not contributing to the public supply, is estimated to have reached approximately 193 million kilowatts, an increase of some 13 million kilowatts over 1959. Including Alaska and Hawaii, total capability available to the United States is estimated to be about 193.9 million.

With an estimated annual peak demand in 1960 of over 139 million kilowatts, the electric industry in the contiguous United States had 35.6 million kilowatts of reserve capability or a 25.5 per cent margin of capability over the estimated annual peak.

Knapp asserted that at the close of 1959 the Soviet Union reported a total of 59.1 million kilowatts in electric-generating stations. During 1960, an estimated 7.5 million kilowatts were added, bringing Russia's total generating capability at the end of 1960 to an estimated 66.6 million kilowatts. Thus, the United States' kilowatt lead over the Soviet Union increased by 6.3 million kilowatts during 1960, from 121 million kilowatts a year ago to 127.3 million kilowatts today.

**T**HE amount of electricity used by each person in a nation provides a good indication of the nation's total productive capacity and of the well-being of the people. In 1960, the estimated use was 4,716 kilowatt-hours for every man, woman, and child in the United States. In the Soviet Union, estimated use was 1,322 kilowatt-hours per capita.



### *AT&T Files Flat Rate Tariffs*

THE American Telephone and Telegraph Company has filed with the Federal Communications Commission a proposed tariff schedule covering its new service, called "Wide Area Telephone Service." The new system will make available interstate calling within specified areas at a flat monthly rate.

The application stated that WATS is designed for the customer who makes a large number of interstate calls each month to widely scattered points, and will pass on savings in operating and other expenses which AT&T expects to realize from the operation of this system. WATS subscribers will be furnished a special line over which interstate station-to-station calls can be originated. Subscribers will not be able to receive calls on this line nor will they be able to make person-to-person, collect, credit card, or intra-state calls.

Payment of a monthly rate will entitle the subscriber to either limited or unlimited use of the line and the choice of six zones within which calls can be terminated. Unlimited service allows the customer to make as many calls as he desires for a flat monthly rate.

Monthly rates for full-time service range from \$500 to \$1,200 for the first

## Telephone and Telegraph

zone, and \$1,800 to \$2,325 for the sixth zone. In contrast rates for limited service range from \$200 to \$385 for zone one and from \$490 to \$620 for zone six.

CUSTOMERS will be able to make calls to telephones in the service areas of the Bell system companies and the other carriers participating in this service. This brings up the question of just what economic impact this will place on the independent telephone companies. There will be the need for certain changes in equipment and some increased operating costs for promotion, billing, and collecting can be expected to be felt by the independents. The new tariff would become effective January 15th unless suspended by the commission before that time.

### *Telephone Statistics*

WHAT has long been suspected by large numbers of people has again been proven true—Washington, D. C., is one of the most "talky" spots on the earth. Recent figures drawn from an American Telephone and Telegraph Company report, entitled "The World's Telephones 1960," indicate that Washington had 83.3 telephones for every 100 residents. The runner-up was White

## TELEPHONE AND TELEGRAPH

Plains, New York, with 70.9 telephones per 100 residents. Canada, however, took the award for the number of telephone conversations per person during 1959—530. The United States trailed in third place with just 496 conversations per year, more than one for every day on the calendar.

In total number of telephones per person the United States again took the lead with 39.5 phones for every resident in the nation. In this category Brazil was low man with only 1.48 phones per 100 persons. Our southern neighbor should take heart, however, since the Soviet Union, which boasts of astounding gains in many fields, is second from the bottom with only 1.9 phones for each 100 comrades.

All figures in the report are for 1959 since it takes a year to compile the statistics. These figures indicate that the number of phones increased by 9 million during this period to bring the grand total of phones in the world to 133.6 million. As a matter of national pride, it might be well to mention that more than half of these belong in the United States.

### AT&T Announces Jamaica Cable

As part of its ever-expanding world-wide communications system, the American Telephone and Telegraph Company has announced plans for a large-capacity undersea telephone cable between the United States and Jamaica in the British West Indies. The cable, scheduled for completion in late 1962, will serve as a major artery in a planned oceanic network for the Caribbean and other South American points.

The new cable will be the first of a new type designed to handle up to 128 voice

circuits. This is more than three times the capacity of the first transoceanic cable laid four years ago. The company has filed an application with the Federal Communications Commission to land the cable near Florida City, Florida.

The proposed system will extend some 850 miles between Florida City and Jamaica. A single, newly developed "armorless" cable will be used for the deep-sea section of the line. This cable has a plastic outer coating instead of armor wires and a stranded steel core to provide tensile strength. Rigid-type "repeaters," or amplifiers, will be spaced about 20 miles apart in the cable.

This is but another step in providing a diversified means of contacting any point in the world. Radiotelephone and eventually satellite relays will be used; however, cable communications are still essential in order to provide dependable service under all conditions.

### RCA Reports Microwave Breakthrough

A MAJOR breakthrough in microwave technology has been announced by the Radio Corporation of America in the development of a tiny solid-state electronic device, a "varactor diode," that is expected to have a profound impact upon military, commercial, and private communications.

Dr. Alan M. Glover, vice president and general manager of RCA's semiconductor and materials division, has listed three major contributions the new diode can make in the field of communications because of its size, weight, and sensitivity.

The three contributions are the following: (1) Facilitate the development of military and commercial micro-

## PUBLIC UTILITIES FORTNIGHTLY

wave communications systems that would be virtually invulnerable to enemy jamming techniques. (2) Extend military and commercial communications into the higher-frequency radio bands, thus multiplying the amount of traffic that can be carried. (3) Make possible low-cost, highly efficient, long-lived, and compact microwave signal receivers that can be used in a variety of applications, including space vehicles, ballistic rockets, and radio telescopes.

The new diode is one of seven types developed by RCA which operate within a frequency range from 2,000 to 20,000 megacycles. They are reported to be so sensitive that they are able to pick up and amplify microwave signals transmitted at frequencies close to those of infrared light.

**D**R. GLOVER has pointed out that the varactor diodes represent a significant step toward the day when the high-frequency bands will be used to multiply many fold the total amount of traffic that can be carried. This could be of great importance since the present frequency bands are receiving more and more demands from military, commercial, and private communications sources.

Microwave communications are point-to-point and are extensively used by telephone and telegraph companies, the armed forces, pipelines, public safety departments, and by a number of foreign governments.

### *Solar Storms Affect Echo I*

**T**HE solar storms which blacked out a good bit of the world's communications also appear to have produced a "substantial change" in the orbit of the

passive balloon satellite, Echo I. Interestingly enough, these same solar storms and the resulting broadcasting difficulties prompted a good many scientists to point out the necessity of an early world-wide communications satellite system to prevent this type of disrupted service.

The storms, according to the National Aeronautics and Space Administration, have slowed the speed of Echo I so that it now takes two additional seconds to complete its orbit around the earth. This was caused, scientists believe, by an increase in the density of the atmosphere which results when particles and radiation from the solar flares strike the atmosphere, heating it up.

### *Ike Orders U.S. Aid for Phone-TV Satellites*

**I**N one of his last official actions of the old year, President Eisenhower on December 30th ordered the Federal Space Agency to help private industry set up satellite systems looking toward world-wide commercial telephone and television service.

The White House policy statement, which could touch off sharp new debate, instructed the National Aeronautics and Space Administration to:

Push research and development projects to demonstrate the feasibility of radio and TV relay stations in space.

Encourage private industry to put its own resources into development of satellite communications systems.

Provide at cost the rockets and facilities to launch such privately owned satellites into orbit.

Whether President-elect Kennedy and the new Congress will endorse this policy remains to be seen. Huge expenditures and potentially huge profits are at stake.

# Financial News and Comment

By OWEN ELY

## *AGA Expects Gas Revenues To Gain 7 Per Cent Per Annum in 1960-70*

REVENUES of the gas industry increased 12 per cent in 1960 to nearly \$5.7 billion, and in 1961 are expected to pass the \$6 billion mark. Future gains are expected to average 7 per cent per annum. The industry now has some 1,400 transmission and distribution companies serving 33.5 million customers with over 93 billion therms of gas annually. The number of customers is currently increasing at the rate of 3 or 4 per cent per annum, and is expected to reach 43 million by 1970, or an average (compounded) gain of 2.5 per cent per annum. Sales of gas



in 1960 were double the amount used ten years ago, and in 1960 gained 6 per cent over 1959. Sales of *natural gas* were up 6.4 per cent but sales of *manufactured and mixed gas* (now less than 3 per cent of the total) declined 2 per cent.

Residential sales, which are about 35 per cent of the total, gained 10 per cent over 1959 and accounted for \$3.2 billion revenues. Residential heating customers increased nearly 8 per cent and now comprise 69 per cent of all residential users. Commercial sales showed a big gain, therms being up 14 per cent and revenues 16 per cent, although the number of customers increased only 1.5 per cent. Industrial sales, on the other hand, gained only 3 per cent due to the downturn in business; they account for half of total sales in therms, although revenues are only a little over one-quarter of the total.

DESPITE regulatory problems at Washington, construction records were broken in 1960 when the gas companies spent some \$1.9 billion for expansion; in 1961 expenditures are expected to increase to \$2.2 billion, up about 16 per cent. Some 29,000 miles of pipeline and utility main network were built last year and 25,000 miles more are planned for 1961, which would bring the total to

DEPARTMENT INDEX	
	Page
AGA Expects Gas Revenues to Gain 7 Per cent Per Annum in 1960-70 ..	105
Chart—Gain in Gas Revenues, 1950-60 ..	107
FPC Chairman Kuykendall Reassures Regarding "Return on Equity" as Rate Base Factor .....	108
Chart—Gain in Gas Sales (Therms), 1950-60 .....	109
Gas as Boiler Fuel Has Gained over Oil .....	110
Dissenting Members of California Commission Oppose "Flow Through" ..	110
Promising New Concepts in Power Production .....	110
Gas Industry Promotion .....	111
Table—Financial Data on Electric Utility Stocks .....	111, 112, 113

## PUBLIC UTILITIES FORTNIGHTLY

654,000 miles. It is expected that the mileage will increase to 750,000 by 1965, an average annual gain for the first half of the decade of 3.5 per cent. The mileage of pipelines is not expected to increase as fast as sales, since additional compressor stations and greater use of storage gas will help take care of residential needs.

The industry now has storage facilities in twenty states, with over 209 storage pools holding some 2.5 trillion cubic feet of gas. Seventy-six million dollars was spent this year on storage facilities, and the average gain in expenditures during the four years 1960-63 is expected to be at the annual rate of 12.5 per cent.

The industry's gross plant is now estimated at \$21.9 billion, a gain of 10 per cent over 1959. Gross plant value has almost tripled in the past ten years, but this rate of gain is expected to slow down; during the next decade total gain is estimated at 106 per cent or an annual average rate of 7.5 per cent.

Proven reserves of natural gas increased 3.2 per cent in 1959 to a total of nearly 263 trillion cubic feet, despite net production of 12 trillion cubic feet. (Figures are not yet available for 1960.) Nearly 6 trillion cubic feet of gas were discovered in 1959 in the form of new reserves, the remaining 2.5 trillion cubic foot increase reflecting further development of existing fields.

**A** MAJOR construction program in 1960 was the completion of the \$193 million Transwestern Pipeline from west Texas to the California-Nevada border, making available additional gas to southern California. Great progress was also made in the Pacific Northwest, following decisions at Washington and Ottawa permitting sizable exports of gas from

western Canada fields to the U. S. Five pipelines are planned or under construction, designed to carry a billion cubic feet of gas daily from Canada to the U. S. Gas is already flowing through the Minnesota and Wisconsin lines of Midwestern Gas Transportation (subsidiary of Tennessee Gas Transmission), from the connection with Trans-Canada Pipe Lines at Emerson, Manitoba. Pacific Gas Transmission, subsidiary of Pacific Gas and Electric, has begun building its 614-mile pipeline to bring natural gas from the Idaho-British Columbia border to northern California. Montana Power and El Paso Natural Gas are also building pipelines or extensions to the Canadian border, and Tennessee Gas is seeking permission to import Canadian gas at Niagara Falls.

Only three of the fifty states now remain without natural gas, Alaska being the latest to join the ranks. Around July the new state expects to obtain gas for the city of Anchorage through a new pipeline from wells on the Kenai Peninsula. Alaska Pipeline and Anchorage Natural Gas are handling the \$17 million project.

**T**HE gas industry has been busy during 1960 in developing "competitive" appliances for the home. These include new gas ranges which can be hung on kitchen walls, mounted on cabinets, or built in, with the oven, broiler, and rotisserie located above range-top level. The new ranges feature swing-out rather than conventional drop-type doors, and one incorporates a "sliding drawer" top-burner section. Another range will use an infrared top burner under a glass cover for fast, cool cookery with only half the amount of gas needed with conventional burners. New gas refrigerators eliminate the need for defrosting.

## FINANCIAL NEWS AND COMMENT

Low-temperature oven controls are becoming popular, as manufacturers have incorporated these devices in residential ranges.

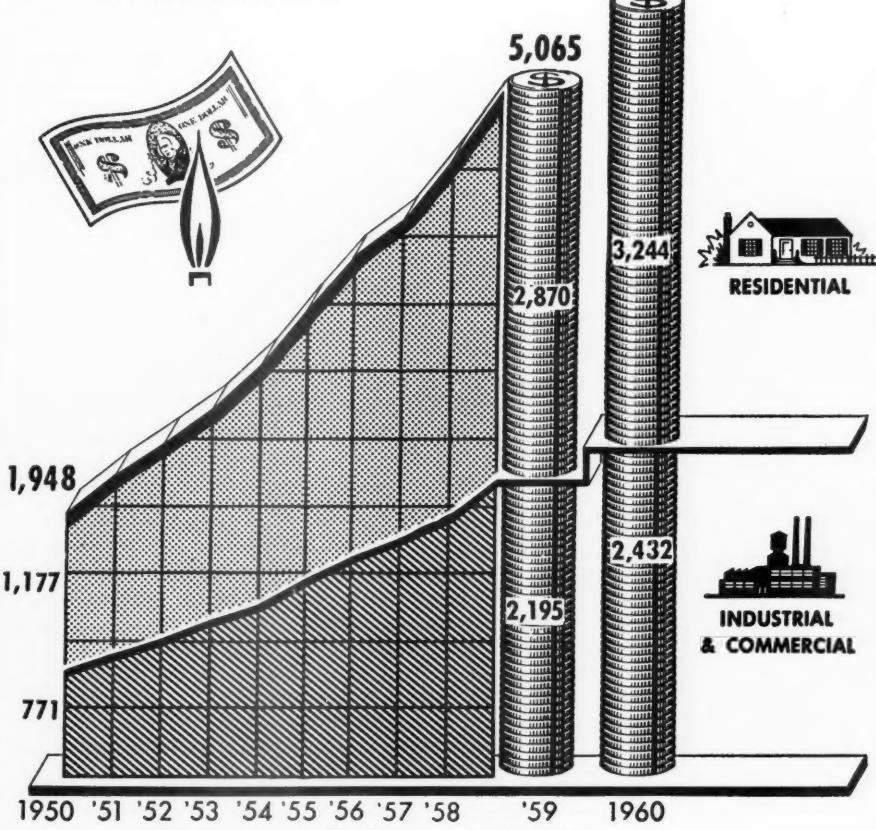
Temperature settings as low as 140 degrees permit preparing meals hours in advance and then holding them at

proper temperatures until ready to serve.

**N**EW instantaneous, through-the-wall water heaters are said to eliminate the need for hot-water storage tanks. They are mounted near outside walls and draw combustion air from outdoors and exhaust

## REVENUES

IN MILLIONS OF DOLLARS



SOURCE: AMERICAN GAS ASSOCIATION

## PUBLIC UTILITIES FORTNIGHTLY

directly outdoors, thus eliminating the need for a chimney connection.

### *FPC Chairman Kuykendall Reassures Regarding "Return On Equity" as Rate Base Factor*

**I**N a recent talk before the New York Society of Security Analysts, Chairman Kuykendall of the Federal Power Commission gave a reassuring reply to questions as to whether the FPC would continue to use 10½ per cent return on common stock equity as the equivalent of fair return on rate base. Queried as to whether they would allow such a return to a gas utility which might have an all-common stock setup (and thus obtain an overall return of 10½ per cent), he stated that he did not know of any company with an all-common stock setup, except perhaps for subsidiaries. He implied that there had been "too much publicity" over the Tennessee Gas decision, and that while return on equity is important, it is not the sole factor. Incidentally, the commission favors higher equity ratios for some pipelines and would not penalize the companies which may wish to improve their ratios. On the other hand, a reasonable proportion of debt in the capital structure is also favored because of the tax benefits thus obtainable.

Regarding area prices, the figures given to the press a short time ago are not necessarily the final word. Amendments will be forthcoming regarding areas and prices, particularly in Texas. The commission plans to hold hearings on area pricing, and all interested parties can appear.

Prices should be fixed which will not only stimulate necessary drilling and de-

velopment work to add new gas reserves, but will also "move the gas to market." Competition of gas with other fuels would be less important as a factor.

**T**HE U. S. Supreme Court has not yet ruled on the question of field price as a determinant in rates. The City of Detroit case was decided by the court of appeals in the District of Columbia, and the Supreme Court denied certiorari. Years ago, in the Hope case, the commission had declared that the "end result" was more important than the methods used to arrive at it. In general, area price should reflect the "cost" of developing new supplies of gas, plus a reasonable profit; but profits should not be high enough to permit all marginal or inefficient producers to make money.

Pipeline producers should be treated the same as independent producers, so far as area prices are concerned, the chairman stated. (The Panhandle case presented a problem with respect to such equal treatment.) He said that he is in favor of production by pipelines.

In the Phillips case the commission denied a rehearing so the case is going to court. He thinks the courts will support the Phillips decision (despite the City of Detroit case) but if the commission is forced to go back to the rate base method of regulating producers, it will be greatly handicapped—it has been estimated that it might take some seventy or eighty years to catch up with the backlog of cases.

**R**EGARDING the question as to whether gas should be used as boiler fuel, he said he did not personally favor this, but nevertheless recognized the need of a pipeline's making interruptible sales in the summer.

In any event, there is nothing in the

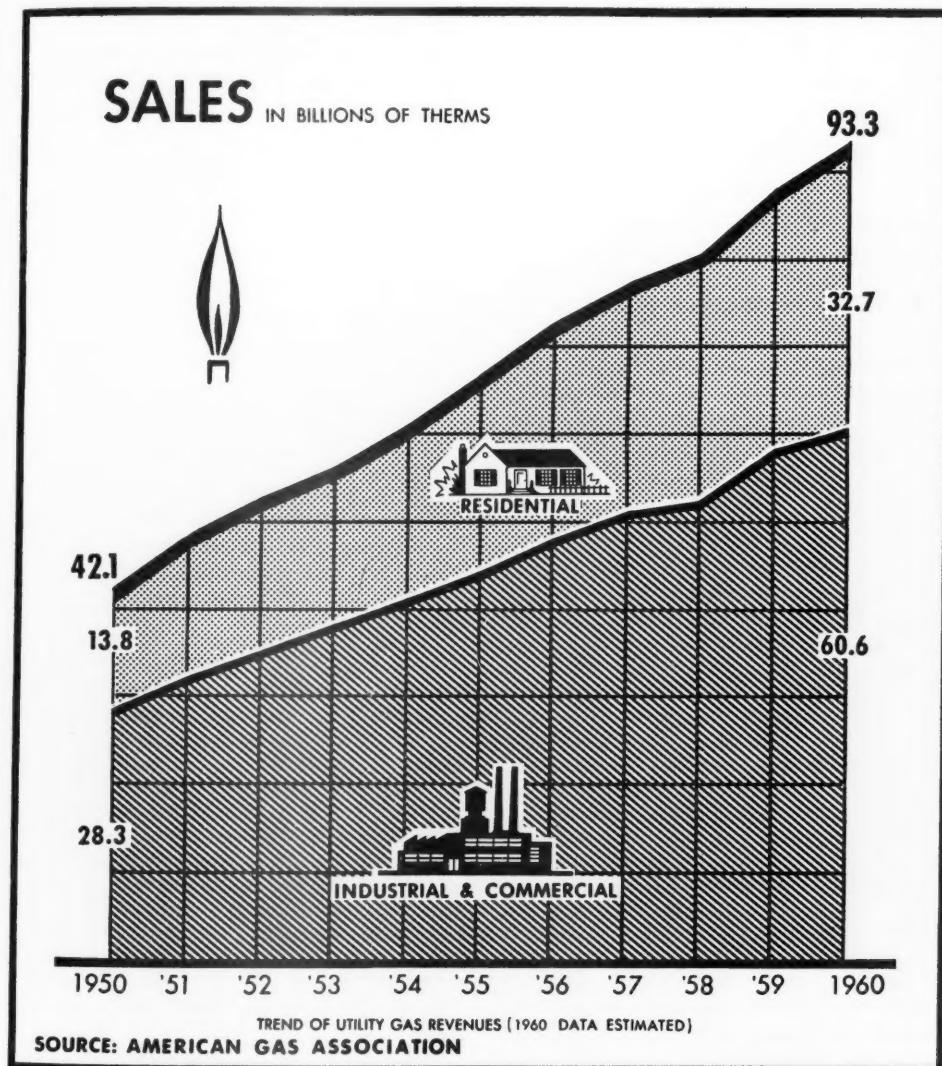
## FINANCIAL NEWS AND COMMENT

act which, in his opinion, gives the commission definite power to allocate the use of gas.

Now that the Panhandle case is out of the way, some of the other older cases

(which had been temporarily laid aside) will be decided in the near future, he indicated.

Copies of the talk were not made available.



## PUBLIC UTILITIES FORTNIGHTLY

### *Gas as Boiler Fuel Has Gained over Oil*

A STUDY, entitled "A Decade of Electric Utility Fuel Experience" by Myles E. Robinson and William L. Kurtz, has been released by the American Society of Mechanical Engineers. This indicates that the amounts of electricity generated by each fuel increased as follows, during the period 1949-58:

Coal	154%
Oil	41
Gas	224
All Fuels	151%

The percentage of total electric energy (excluding hydro) generated by coal was 68 per cent in 1958 *versus* 67 per cent in 1949; that generated by oil declined from 14 per cent to 8 per cent, while gas-fueled generation increased from 19 per cent to 24 per cent.

The study pointed out that, of the three major fuels, based on the heat rate, coal made the greatest improvement in efficiency in the decade, with gas second and oil a fairly close third. Coal's greatest gains have been in the East South Central states, oil's best showing was in the South Atlantic region, and gas has made its best increase in the East North Central states.

### *Dissenting Members of California Commission Oppose "Flow Through"*

LAST April the California commission approved the use of "flow through" accounting for tax savings by Southern California Edison, in connection with the use of accelerated depreciation. Recently, in connection with the company's application for payment of a 4 per cent

stock dividend on its common and original preferred stock, two members of the commission criticized the company's accounting methods. They argued that income taxes would be higher in later years, and that a reserve should be set up to take care of these increases.

Commissioner C. Lyn Fox, who wrote the dissenting opinion, said Edison's accounting procedure was "a misrepresentation of its true net income and a falsification of the true financial condition of this utility." According to Dow-Jones, J. K. Horton, president of the company, stated that there was "absolutely no basis for the charge" of income overstatement, and said the accounting procedure was used by many other utility companies in California and other states.

### *Promising New Concepts in Power Production*

M. W. KELLOGG & Co. has developed a new kind of fuel cell, using an amalgam of sodium in mercury and oxygen to produce electricity, according to *Business Week* (December 24th). The cell was developed in connection with a Navy project and Kellogg is now trying to adapt it as a practical power plant for military use. At present the cell produces only 75 kilowatts (direct current) but cells can be hooked together for greater production. It represents a considerable advance over such other fuel cells as the Hydrox and the Carbox, and efficiency is said to reach 60 per cent. The new cell can develop twice the power of the Hydrox cell. As compared with a commercial storage battery with equivalent power output, it weighs only one-thirtieth as much.

Another new development is Westinghouse Electric's discovery that certain

## FINANCIAL NEWS AND COMMENT

combinations of ceramics and metals can produce electricity when heated. This is called the Austin effect after one of the company's retired engineers (now a consultant) who discovered the effect accidentally. (As power can be produced at high temperatures this suggests possible use in atomic reactors.) Production of electricity does not depend on different temperatures in different parts of the device, as it does with thermoelectric or thermionic converters; and power continues to be produced (at a declining rate) for some time after the heat is removed. The device is in early stages of development and the power output thus far is small.

### Gas Industry Promotion

LESTER T. POTTER, president of the American Gas Association and the Lone Star Gas Company, whose year-end statement contains the forecast material

noted earlier in these pages, has pointed specially to the gas turbine as a promising new development.

Turbines fueled with natural gas may be used to drive compressors, pumps, generators, and air conditioners. In addition, the exhaust heat also may be harnessed for heating. Research has also developed prototype equipment for the nondestructive inspection of steel pipe which will be field tested in 1961. Completed projects include testing studies on pipeline flow efficiency, development of flow tracer techniques, and field tests of a foam method for removing water from flooded gas wells.

**C**ONTINUED research projects are also taking place in the process of producing synthetic gas from coal and oil and emphasis has now been shifted to hydrogasification in which hydrogen is reacted directly to produce a high Btu gas equivalent to natural gas.

### 3

#### FINANCIAL DATA ON ELECTRIC UTILITY STOCKS

Annual Rev. (Mill.)		12/27/60 Price About	Divi- dend Rate	Approx. Yield	Recent Share Earns.	In Sh. Recent	Earn. Aver.	Price- 5-yr. Earn. Ratio	Div. Pay- out	Approx. Book Value
\$152	S Allegheny Power System	41	\$1.70	4.1%	\$2.38N	2%	5%	17.2	71%	\$18
324	S American Elec. Power	57	1.88c	3.3	2.53N	6	8	22.5	74	24
63	O Arizona Pub. Serv.	49	1.20	2.4	*2.01Se	*11	* 6	*24.4	60	18
13	O Arkansas Mo. Pwr.	20	1.00	5.0	1.44Se	7	3	13.9	69	10
38	S Atlantic City Elec.	36	1.20	3.3	*1.57N	*10	* 9	*22.9	77	12
169	S Baltimore G. & E.	28	1.00	3.6	1.42Se	—	8	20.0	70	13
8	O Bangor Hydro-Elec.	43	2.20	5.1	3.26Oc	6	8	13.2	67	28
7	O Black Hills P. & L.	35	1.48	4.2	2.56Oc	1	4	13.7	58	22
116	S Boston Edison	66	3.00	4.5	3.69De	4	4	17.9	81	51
31	A Calif. Elec. Power	18	.84	4.7	*1.02Se	*D12	*10	*17.6	82	12
24	O Calif. Oreg. Power	43	1.60	3.7	*1.88Au	—	*	*22.9	85	26
10	O Calif. Pac. Util.	20	.90	4.5	1.37Se	7	4	14.6	66	12
76	S Carolina P. & L.	44	1.48	3.4	2.23N	3	6	19.7	66	21
34	S Cent. Hudson G. & E.	28	1.00	3.6	*1.46Se	* 5	* 8	*19.2	68	13
26	O Cent. Ill. E. & G.	40	1.44	3.6	2.34Oc	8	12	17.1	62	15
43	S Cent. Ill. Light	38	1.52	4.0	2.31N	1	10	16.4	66	18
60	S Cent. Illinois P. S.	58	1.92	3.3	2.99N	10	7	19.3	64	20
20	O Cent. Louisiana Elec.	23	1.00	3.8	1.31Se	24	7	21.4	76	19
42	O Central Maine Power	26	1.40	5.4	*1.97N	*19	*	*13.2	71	21
160	S Cent. & South West	40	.96	2.4	1.44Se	4	6	27.8	67	11
12	O Cent. Vermont P. S.	20	1.08	5.4	*1.41N	* 5	* 2	*14.2	77	13
140	S Cincinnati G. & E.	37	1.50	4.1	2.26Se	23	3	16.4	66	16
8	O Citizens Util. "B"	17	.56	3.3	.78Se	14	6j	21.8	72	4
130	S Cleve. Elec. Illum.	55	1.80	3.3	3.05Se	4	9	18.0	59	26
7	O Colo. Cent. Power	31	.75	2.4	1.26N	15	6	24.6	60	11

**PUBLIC UTILITIES FORTNIGHTLY**

Annual Rev. (Mill.)		(Continued)	12/27/60	Divi-	Recent	% Incr.	In Sh.	Earn.	Price-	Div.	Approx.
			Price About	idend Rate	Approx.	Share Earns.	5-yr. Recent	Aver.	Earn. Ratio	Pay- out	Book Value
52	S	Columbus & S. O. E. ....	51	1.80	3.5	2.88N	21	6	17.7	62	24
454	S	Commonwealth Edison ....	68	2.00h	5.3h	3.84Oc	5	10	17.7	52	33
16	A	Community P. S. ....	30	1.00	3.3	1.52Se	6	6	19.7	66	12
85	O	Conn. Lt. & Pr. ....	26	1.20	4.6	*1.49N	* 8	* 4	*17.4	80	15
615	S	Consol. Edison ....	67	3.00	4.5	*3.83Se	D1	* 6	*17.5	78	49
258	S	Consumers Power ....	62	2.60	4.2	3.52N	D4	5	17.6	74	35
90	S	Dayton P. & L. ....	55	2.40	4.4	3.25Se	1	4	16.9	74	30
53	S	Delaware P. & L. ....	44	1.20	2.7	1.62Se	2	9	27.2	70	26
267	S	Detroit Edison ....	48	2.20	4.6	2.65N	12	3	18.1	83	27
156	A	Duke Power ....	53	1.60	3.0	2.24Se	4	10	23.6	71	20
101	S	Duquesne Light ....	26	1.18	4.5	*1.52Se	*10	* 5	*17.1	78	10
36	O	East. Util. Assoc. ....	39	2.20	5.6	2.59Oc	D15	6	15.1	85	26
3	O	Edison Sault Elec. ....	17	.90	5.3	1.30Ma	3	6	13.0	70	9
17	O	El Paso Electric ....	47	1.16	2.5	1.77Oc	17	7	26.6	66	11
13	S	Empire Dist. Elec. ....	34	1.36	4.0	1.92Se	8	7	17.7	71	16
62	S	Florida Power Corp. ....	36	.88	2.4	1.28Se	20	10	28.1	69	12
155	S	Florida P. & L. ....	62	1.00	1.6	2.08Se	9	17	30.0	48	15
4	O	Florida Pub. Util. ....	20	.72	3.6	1.28Se	5	9	15.6	56	10
231	S	General Pub. Util. ....	26	1.16	4.5	*1.53Se	* 2	* 7	*17.0	76	15
7	O	Green Mt. Power ....	21	1.10	5.2	1.45Oc	18	3	14.5	76	12
78	S	Gulf States Util. ....	36	1.00	2.8	1.39N	1	8	25.9	72	11
54	A	Hartford Electric ....	63	3.00	4.8	*3.42Se	*D10	NC	*18.4	82	43
27	O	Hawaiian Elec. ....	61	2.50	4.1	3.11Se	D5	7	19.6	80	34
105	S	Houston L. & P. ....	90	1.60	1.8	3.29N	9	6	27.4	49	21
34	S	Idaho Power ....	53	1.80	3.4	2.60Se	20	1	20.4	69	27
104	S	Illinois Power ....	61	2.20	3.6	2.92N	10	14	20.9	75	20
54	S	Indianapolis P. & L. ....	51	1.90	3.7	2.64Se	10	9	19.3	72	18
33	S	Interstate Power ....	21	.95	4.5	1.17Se	—	4	17.9	81	8
42	S	Iowa Elec. L. & P. ....	43	1.80	4.2	2.56N	7	6	16.8	70	20
51	S	Iowa-Ill. G. & E. ....	43	1.90	4.4	2.50N	D3	4	17.2	76	20
47	S	Iowa P. & L. ....	38	1.60	4.2	2.38Se	NC	3	16.0	67	18
40	O	Iowa Pub. Service ....	18	.80	4.4	1.23N	4	4	14.6	65	10
17	O	Iowa Southern Util. ....	34	1.48	4.4	2.12N	D5	9	16.0	70	20
64	S	Kansas City P. & L. ....	58	2.32	4.0	3.34N	11	6	17.4	69	29
36	S	Kansas G. & E. ....	50	1.68	3.4	2.74N	—	7	18.2	61	22
54	S	Kansas P. & L. ....	36	1.42	3.9	2.49Se	8	9	14.5	55	17
47	O	Kentucky Util. ....	37	1.60	4.3	2.65Se	D4	6	14.0	60	23
8	O	Lake Superior D. P. ....	26	1.28	4.9	1.74Se	4	4	14.9	74	17
136	S	Long Island Ltg. ....	41	1.40	3.4	*2.18Se	* 9	* 9	*18.8	64	20
66	S	Louisville G. & E. ....	52	1.52	2.9	2.73Se	13	8	19.1	56	21
12	O	Madison G. & E. ....	29	1.00	3.4	2.07Se	3	3	14.0	48	39
5	A	Maine Pub. Service ....	22	1.24	5.6	1.44N	D1	2	15.3	86	14
8	O	Michigan G. & E. ....	76	2.00e	6.0e	5.75Se	4	12	13.2	35	29
198	S	Middle South Util. ....	31	1.00	3.2	1.48Oc	6	7	20.9	68	14
31	S	Minn. P. & L. ....	35	1.60	4.6	2.50N	13	5	14.0	64	21
16	S	Missouri P. S. ....	20	.72f	3.6	1.10N	12	5	18.2	65	8
8	O	Missouri Util. ....	29	1.44	4.9	2.02Se	18	—	14.4	71	18
46	S	Montana Power ....	31	1.12	3.6	*1.49Se	* 6	* 8	*20.8	75	9
172	S	New England Elec. ....	22	1.08	4.9	1.36Je	4	3	16.2	79	15
52	O	New England G. & E. ....	25	1.24	5.0	1.75Se	2	5	14.3	71	17
105	S	N. Y. State E. & G. ....	28	1.20	4.3	*1.85N	*D4	* 8	*15.1	65	18
285	S	Niagara Mohawk Power ..	38	1.80	4.7	*2.20Oc	* 8	—	*17.3	82	23
104	O	Northern Indiana P. S. ....	67	2.32	3.5	3.36Se	11	5	20.0	69	26
170	S	Northern Sts. Power ....	28	1.18	4.2	1.49Se	4	6	18.8	79	12
12	O	Northwestern P. S. ....	24	1.10	4.6	1.77Se	17	6	13.6	62	12
151	S	Ohio Edison ....	35	1.48	4.2	2.14N	10	6	16.4	69	17
58	S	Oklahoma G. & E. ....	35	1.20	3.4	1.44N	D3	6	24.3	83	11
29	S	Orange & Rockland Utils. .	40	1.10	2.7	*1.53De	*20	* 14	*26.1	72	14
19	O	Otter Tail Power ....	35	1.80	5.1	2.32Se	D11	6	15.1	78	24
535	S	Pacific G. & E. ....	73	2.60	3.6	4.07Se	9	5	17.9	64	42
58	O	Pacific P. & L. ....	40	1.80	4.5	*2.22Au	* 7	* 4	*18.0	81	23
138	S	Penn. P. & L. ....	27	1.25	4.6	1.75N	3	5	15.4	71	13
264	S	Philadelphia Elec. ....	50	2.24	4.5	2.82Oc	D2	5	17.7	79	26
40	O	Portland G. E. ....	32	1.32	4.1	2.03N	20	4	15.8	65	18
82	S	Potomac Elec. Power. ....	32	1.32	4.1	*1.96Se	*20	* 9	*16.3	67	18

## FINANCIAL NEWS AND COMMENT

Annual Rev. (Mill.)	(Continued)	12/27/60		Divi- dend Rate	Approx. Yield	Recent Share Earns.	% Incr.		Price- Earn. Ratio	Div. Pay- out	Approx. Book Value
		Price About	Sh.				In	Sh.	Earn.		
102	S Pub. Serv. of Colo. ....	68	2.10	3.1	2.95Se	15	6	23.1	71	27	
369	S Pub. Serv. E. & G. ....	44	2.00	4.5	2.54Se	2	4	17.3	79	24	
88	S Pub. Serv. of Ind. ....	48	2.10	4.4	2.58N	D6	3	18.6	81	27	
34	O Pub. Serv. of N. H. ....	20	1.04	5.2	1.39Oc	7	2	14.4	75	14	
17	O Pub. Serv. of N. M. ....	40	1.00	2.5	1.62Se	7	10	24.7	62	12	
32	S Puget Sound P. & L. ....	33	1.56	4.7	2.11Se	1	9	15.6	74	23	
72	S Rochester G. & E. ....	45	1.80b	7.0b	*3.00Se	D10	* 7	*15.0	60	30	
10	S St. Joseph L. & P. ....	33	1.60	4.8	2.25Se	12	6	14.7	71	18	
71	S San Diego G. & E. ....	30	1.20	4.0	1.91Oc	4	8	15.7	63	18	
12	O Savannah E. & P. ....	30	1.12m	3.7	1.30Se	4	1	23.1	86	12	
12	O Sierra Pacific Pr. ....	47	1.60	3.4	2.52Oc	9	14	18.7	63	17	
280	S So. Calif. Edison ....	69	2.60k	3.7	*4.31Se	*16	* 6	*16.0	60	42	
56	S So. Carolina E. & G. ....	46	1.40	3.0	1.99Se	12	6	23.1	70	19	
8	O Southern Colo. Pr. ....	22	.90	4.1	1.09Au	D16	—	20.2	83	13	
297	S Southern Co. ....	48	1.40	2.9	2.06N	8	9	23.3	68	17	
21	S So. Indiana G. & E. ....	36	1.70	4.7	2.57Oc	3	2	14.0	66	21	
9	O So. Nevada Power ....	47	1.26m	2.7	2.18Oc	20	5	21.9	58	15	
4	O Southwestern E. S. ....	17	.76	4.5	1.01N	—	5	16.8	75	8	
52	S Southwestern P. S. ....	27	.88	3.3	1.13N	9	9	23.9	78	7	
36	A Tampa Electric ....	37	.72	1.9	1.22N	28	7	30.3	59	10	
183	S Texas Utils. ....	81	1.92	2.4	3.11N	7	9	24.8	62	21	
47	S Toledo Edison ....	19	.70	3.7	1.08Se	D7	2	17.6	65	9	
20	O Tucson G. E. L. & P. ....	33	.80	2.4	1.21Se	12	8	27.3	66	9	
147	S Union Electric ....	39	1.80	4.6	*2.18Se	*20	* 5	*17.9	83	17	
39	O United Illum. ....	29	1.38	4.7	*1.73Se	* 5	* 1	*16.8	80	16	
6	O Upper Peninsula Pr. ....	32	1.60	5.0	2.11Se	22	—	15.2	76	19	
50	S Utah Power & Light ....	35	1.32	3.7	1.88N	2	5	18.6	70	19	
151	S Virginia E. & P. ....	53	1.20	2.3	1.86N	11	9	28.9	65	17	
36	S Wash. Water Pr. ....	41	2.00	4.9	*2.37N	*D13	* 7	*17.3	84	29	
82	O West Penn Power ....	68	3.00	4.4	3.61Se	4	3	18.9	83	26	
13	O Western Lt. & Tel. ....	49	2.40	4.9	3.49Oc	9	6	14.0	69	27	
32	O Western Mass. Cos. ....	24	1.20	5.0	1.59N	D6	—	15.1	75	18	
134	S Wisc. El. Pr. (Cons.) ....	42	1.80	4.3	2.83Se	3	7	14.8	64	27	
48	O Wisconsin P. & L. ....	36	1.48	4.1	2.38Se	1	7	14.7	62	21	
46	S Wisconsin P. S. ....	30	1.30	4.3	2.05N	9	5	14.6	63	17	
Averages .....		4.0%		6%		6%		18.6	70%		

### Foreign Companies

217	A American & Foreign Pr. ....	9	\$.50	5.6%	\$1.30De	D33%	0%	7.0	38%	32
151	A Brazilian Traction ....	4	.25	6.3	.58De	D10	—	6.9	43	28
97	A British Col. Pr. ....	35	1.60	4.6	2.48De	27	9	14.1	65	36
20	O Calgary Power ....	24	.40	1.7	1.06Se	9	18	22.6	38	6
18	A Gatineau Power ....	36	1.50	4.2	1.98De	D22	—	18.2	76	21
16	A Quebec Power ....	35	1.60	4.6	2.41De	3	9	14.5	66	26
77	A Shawinigan Water & Pr. ....	29	.68	2.3	1.45De	D10	8	20.0	47	19

\*Deferred taxes resulting from liberalized depreciation are not normalized. If they had been normalized the price-earnings ratio would be higher, and the rate of increase in share earnings would be smaller. D—Decrease. NC—Not comparable. A—American Stock Exchange. O—Over-counter or out-of-town exchange. S—New York Stock Exchange. Ja—January; F—February; Ma—March; Ap—April; My—May; Je—June; Ju—July; Au—August; Se—September; Oc—October; N—November; De—December. b—Also 3 per cent stock dividend (paid January 25, 1960) included in the yield; similar dividends are paid annually, representing balance of earnings. c—Also 2½ per cent stock dividend January 10, 1961. e—Also regular annual 3.3 per cent stock dividend (3 per cent paid in earlier years), included in the yield. f—Also regular stock dividend of one-half per cent quarterly, included in yield (paid since 1956). h—Also 2.4 per cent stock dividend to be paid December 1, 1960, included in yield; stock dividends are paid annually, reflecting balance of earnings. j—The rate of increase would be 12 per cent if the present number of shares had been used to compute share earnings of past years, instead of using the number of shares actually outstanding at the end of each year. k—Also 4 per cent stock dividend February 24, 1961. l—Also 5 per cent stock dividend February 17, 1961. m—Five per cent stock dividend payable January 18, 1961—cash dividend on new stock 84 cents.



## What Others Think

### The Landis Report

DURING the last week of 1960 the special report to President-elect Kennedy on the regulatory agencies was released. The controversial document was prepared by James M. Landis, formerly chairman of both the Securities and Exchange Commission and the Civil Aeronautics Board. It has been noted that Mr. Landis served under the first SEC chairman, Joseph P. Kennedy, the President-elect's father. He subsequently succeeded the elder Kennedy to the SEC chairmanship and later became his associate.

The report suggests a number of reforms that can hardly be called new. Numbered among these are proposals to increase the powers of examiners, cut down on procedural complications, increase budgets, extend the terms of members, and increase the administrative authority of chairmen. The report also calls for the issuance of an Executive Order covering ethics of government employees and their duty to reject and refrain from receiving ex parte presentations in pending matters before them for adjudication on the record. Such an Executive Order, Mr. Landis believes, should also specifically prohibit any such contacts by any person in or part of four new executive posts that he would like to see created.

THESE new posts would be the following: (1) An Office for the Co-ordination and Development of Transportation Policy. This group would develop and implement a national transportation policy by a reorganization plan, transferring to this new office all the responsibilities now vested in the Under Secretary of Commerce for Transportation. (2) An Office for the Co-ordination and Development of Communications Policy and the transferral to this office of all the powers relating to telecommunications that are now vested in the Office of Civil and Defense Mobilization. (3) An Office for Co-ordination and Development of Energy Policy. This group would have the authority to propose to the President plans for the development of the energy resources of the nation. (4) An Office for the Oversight of Regulatory Agencies which would assist the President in discharging his responsibilities of assuring the efficient execution of the laws that the agencies administer.

THE most far-reaching proposal in the Landis report is the establishment of a so-called "czar" within the Executive Office who would act as an overall coordinator. The report states:

## WHAT OTHERS THINK

... An answer that can be made to the co-ordination of interagency activities is the consolidation of their various functions within a new department. Such an answer may eventually be the right answer to many of the situations herein detailed. It was the answer made in 1953 by the creation in the Department of Health, Education, and Welfare and the consolidation within it of functions formerly widely dispersed. But the beginnings of that project go back thirty years to a recommendation by President Harding in 1923. The present needs are too pressing to await the initiation of what would be a mammoth project of consolidation in the fields of transportation, communication, and energy, and even a huge project in any one of them. The prime and immediate need in these fields is for developing and co-ordinating policy immediately at a high staff level. Operations for the moment can be left to the existing agencies, whose conduct should, in the light of these recommendations, show marked improvements. If experience later would dictate the desirability of the consolidation of certain operating functions, they will then have become sufficiently identified and understood to enable their intelligent consolidation in an appropriate departmental structure. To attempt such consolidation in the absence of the experience that would be derived from determined effort to evolve policy through co-ordination directly under the President, would be substantially to plan in *vacuo*. The creation of a mechanism for staff co-ordination can and should begin now.

**T**HE major objections voiced to this proposal have been that it smacks of ministerial regulation and could ruin the

independent character of the commissions.

A further step in this direction would be Mr. Landis' proposal that the President should have authority to remove regulatory commission chairmen at his pleasure.

The 87-page report is sharp in its criticism of the Federal Power Commission. It states:

The Federal Power Commission without question represents the outstanding example in the federal government of the breakdown of the administrative process. The complexity of its problems is no answer to its more than patent failures. These failures relate primarily to the natural gas field, in the commission's handling of its responsibilities with respect to the transmission and the production of natural gas. Enough has already been said about the delays in this field, so terribly costly to the public and so productive of unemployment in other basic industries.

**T**HE report places great emphasis on insisting on a higher caliber of commission appointments. The report fails to mention, however, that should the "czar" idea be initiated the broad policy-making powers of commission members would become controlled by strings ending in the White House. In spite of praising the technical excellence on the part of the Federal Communications Commission staff, the report has this to say about that body:

The Federal Communications Commission presents a somewhat extraordinary spectacle. Despite considerable technical excellence on the part of its staff, the commission has drifted, vacil-



lated, and stalled in almost every major area. It seems incapable of policy planning, of disposing within a reasonable period of time the business before it, of fashioning procedures that are effective to deal with its problems. The available evidence indicates that it, more than any other agency, has been susceptible to ex parte presentations, and that it has been subservient, far too subservient, to the subcommittees on communications of the Congress and their members. A strong suspicion also exists that far too great an influence is exercised over the commission by the networks.

IT seems certain that a number of Mr. Landis' suggestions will be adopted by the regulatory agencies since a good part of these are of a noncontroversial nature. The new President can also be expected to follow the Landis suggestion regarding an Executive Order on the subject of governmental ethics; however, the broader programs are likely to run into trouble in the halls of Congress. Congress, Democratic and Republican members alike, has been hit by Mr. Landis' charges of mediocre political appointments and the proposals, regardless of the legislative merit, may have a tough time when the lawmakers begin to work with bills which would

## WHAT OTHERS THINK

try to put into effect some of the proposed changes. Of course all of this assumes that the President-elect will "buy" the Landis report in its entirety.

There would seem to be a good chance that the new chief executive will exercise a good bit of caution before endorsing the stronger sections of the report and

the possibility exists that he may reject them outright. Only time will tell what final influence the report will have. Congress, however, will not be happy about giving up its part in the regulatory process in favor of stronger executive control.

—C. M. B.

### Saline Water Conversion

**T**WENTY-ONE papers, covering various aspects of saline water conversion, presented at a symposium at the 1960 national convention of the American Chemical Society, have been published under the title "*Saline Water Conversion*," Number 27, Advances in Chemistry Series. The papers published in this volume give an accurate technical report of the current state of knowledge in the field of saline water conversion. The broad range of subject matter covered in these papers represents some of the latest work on this vital problem.

From time to time we have heard differing claims made regarding this or that particular water-conversion process. In the introduction to this volume W. Sherman Gillam, chairman of the Office of Saline Water in the U. S. Department of the Interior, states:

Low-cost saline water conversion is a problem which has not been satisfactorily solved to date. New ideas, new processes, innovations, and improvements on existing processes are needed and can be achieved only through continued research. The development of saline water conversion processes has advanced in a number of broad fields, each of which incorporates a number of different processes. These fields can be conveniently classified as (1) distillation, (2) processes utilizing membranes, (3) separation by freezing, and

(4) other physical, chemical, electrical, or biological processes.

**O**NE of the most interesting articles in this volume is "Objectives and Status of the Federal Saline Water Conversion Program" by J. W. O'Meara, Office of Saline Water, Department of the Interior. Mr. O'Meara states that water problems, ranging from shortages to excesses, touch every state in the Union. He notes that southern California has long ago outgrown its water supply and a project which brings water from 240 miles away—once called wasteful overdevelopment—will soon be inadequate.

Mr. O'Meara points out that ocean-going ships have for some time relied on the conversion of sea water for their supply of fresh water. He then outlines the various test programs which the federal government has entered into to determine just what the best method of water conversion may be.

It is stated in Mr. O'Meara's paper that even while these test plants are under construction, research and development programs continue since research is the key to progress.

A number of articles are contained in this volume on the subject of conversion of salt water by the relatively new freezing process. Henry M. Curran of St. Edward's University at Austin, Texas,

## PUBLIC UTILITIES FORTNIGHTLY

contributed an article entitled "Energy Computations for Saline Water Conversion by Idealized Freezing Process," and Herbert F. Wiegandt of Cornell University at Ithaca, New York, is represented by a paper entitled "Saline Water Conversion by Freezing."

**W**ITH the increased interest in utilizing solar power, the article by George O. G. Lof on solar distillation basins should be of general interest to the utility industry. He notes that in solar water conversion, sunlight passes through transparent cover and is absorbed on the black bottom of a basin. Water in this basin is warmed by the energy released from the sunlight and vaporization into the air space above the water increases the humidity to saturation. This water vapor condenses out on the cooler transparent surface. The condensate forming on the sloping cover runs down into collecting troughs.

This article is followed by a field evaluation of solar sea water stills by J. W. Bloemer, R. A. Collins, and J. A. Eibling. In this article construction methods and performance data are presented on solar sea water stills under evaluation at the Florida solar distillation research station. At this station, three stills representing two basic designs have been constructed and operated.

This collection of papers on the various methods of desalting water brings under one cover the best thinking avail-

able on this subject. It is quite clear that the entire problem of water supply for our growing industrial and population demands has not, as yet, been solved. While scientists concern themselves with the various methods and technical means of providing the needed water, some conservationists have stated that enough water is available providing it is used wisely and efficiently.

**C**LARLY much more research and development will have to be done before a truly economical means of converting salt water is found. Even then, it may well be that several differing processes will have to be used, depending on such factors as geographical location, the particular substances that must be extracted from the water, and the availability of fuel sources. The expense of fuel is sure to be one of the determining factors in the economical production of pure water. It has been suggested that natural gas could be used in the various distillation processes. Atomic energy too is sure to play an increasing rôle as various technical improvements make the atomic reactors more efficient and less costly.

This collection is a must for the library of any who are interested in water conversion.

**SALINE WATER CONVERSION, Advances in Chemistry Series, No. 27, 246 pages. Price \$5.85. Available from the Special Issue Sales, American Chemical Society, 1155 16th street, N. W. Washington 6, D. C.**

## Anniversary of Edison Lighting

**T**HE General Electric Company in December of last year recalled the story of the first public demonstration of electric illumination. It told of how on December 21, 1879, Thomas A. Edison

invited the public to visit Menlo Park, New Jersey, on the coming New Year's eve to witness his new invention.

The account relates that more than 3,000 persons accepted. Some came from

## WHAT OTHERS THINK

as far away as 20 miles by carriage. Others arrived on special trains operated out of New York and Philadelphia.

As the winter twilight deepened into darkness, the crowd gathered outside of Edison's laboratory, awaiting the exciting moment when Edison would throw a switch to send electric power into 60 of his new incandescent bulbs, placed on poles up and down the snow-covered street.

As the burst of light illuminated the neighborhood far brighter than had been seen on gas- or arc-lighted streets, the crowd applauded. One typical comment was, "Yes sir, it's a wonderful sight, but durned if I can figure how Edison ever got those red-hot hairpins into those bottles!"

Although visitors came to Menlo Park in throngs following the demonstration, and the newspapers carried glowing accounts of the remarkable achievement, the public was slow to accept the new light source. Those with an interest in gas and arc lamps were naturally opposed to the new lamp. In fact, as Edison's idea gained ground, there were two attempts to damage the generating equipment during demonstrations before municipal groups which had come to Menlo Park.

Edison was asked to install a trial lighting system in lower Manhattan which he eventually did. This was the home of the Pearl Street station.

EDISON had to establish a manufacturing plant to make his bulbs and a plant to make his generating equipment, but in a year or two, he accomplished both. The GE release states:

Early in 1881, the Edison Electric Light Company, holding company for Edison's investments and manufacturing concerns, felt the time had arrived to move headquarters across the river to New York city. It leased an ornate brownstone mansion at 65 Fifth avenue for general offices and a room in which to show the new lamp and its potential uses in the home, in business places, and for municipal lighting of streets and public places.

THE GE report states that among the first customers to install Edison's new lamp for illumination were the famous banking house of Drexel, Morgan and Company, the *New York Herald*, *The New York Times*, and Sweet's restaurant on Fulton street, a popular eating place for people of prominence in those days.

For the first three months Edison charged nothing to his customers, anticipating that there might be breakdowns or interruptions from time to time. He also took a loss in supplying lamps. While they cost him \$1.25 to make, he sold them for 40 cents each. But in a year or two he had reduced manufacturing costs to 37 cents each, and finally to 22 cents. Because he still retained the 40-cent price, he began to make a profit from his invention. As has been reported many times, Edison was no businessman. Money details were out of his select sphere.

Despite ups and downs and a disastrous fire, his electric light business grew. And from these small beginnings, the business of lighting homes with electricity has mushroomed so that today nearly two and one-half billion electric light sources of several thousand types and sizes will be produced in the United States. America today is by far the world's best-lighted nation.

## Quebec Power Growth

**A** RECENT series in the *New York Herald Tribune*, by Gene Gleason, has explored the industrial revolution experienced in the Quebec Province of Canada. The second of these articles was devoted to the expansion of industry and hydroelectric power in the area that, not too many years ago, was mainly inhabited by moose, bear, and other such animals.

Mr. Gleason notes that only eight years ago construction work began on the Bersimis river hydroelectric project. Some 5,000 men were engaged in the construction of this facility, which included a series of earth and concrete dams and two powerhouses. The Bersimis system now produces some 2.1 million horsepower of energy. A 3,000-volt transmission line carries this power to Quebec city and Montreal. Mr. Gleason states:

. . . Six twin towers, each 200 feet high, stand one mile apart on the opposite sides of the Saguenay river, bridging the river in one of the great engineering feats of the Bersimis project. When the winds roar through the gorge, the curving bridge of wires sways in a wide arc but never snaps.

It is noted by Mr. Gleason that the first great demand for electric power came about when paper mills were established in the early nineteenth century. Following this, the Aluminium Company of Canada moved into the area—some thirty-five years ago—and the hydroelectric potential of the area was again put to good use, since one ton of aluminum requires enough electrical energy to light an average house for ten years.

**A**LCAN, a subsidiary of Aluminium, Ltd., developed a private system

which attained more than 2 million horsepower capacity by World War II. Following the war, power demands so increased that Alcan expanded its system by another 1,560,000 horsepower. With subsequent increases the Alcan plant at Arvida has become the world's largest aluminum smelting installation, employing more than 7,000 persons.

The various Alcan projects have reshaped the entire Saguenay area. Railroads have been built to supply a company-constructed deep-sea port, a model town has been established, including a first-rate hotel. Virtually all of the employees, as well as many of the executives of this operation, are French-Canadians from the area.

**T**HE Quebec Hydro-Electric Commission has announced plans for a new development, 125 miles north of the St. Lawrence river. This project called the Manicouagan-Outardes is expected to ultimately reach a capacity of 6 million horsepower.

Mr. Gleason notes that the complex will include a concrete dam, 4,000 feet long and 650 feet wide on the Manicouagan river. Five new powerhouses, plus regulation of two rivers to increase the capacity of the existing powerhouses, will also be undertaken. Mr. Gleason observes that the hydroelectric power has played a great part in sweeping aside the barriers that have prevented the conquest of potentially productive virgin territory. It is always interesting to learn of the activities of our northern neighbor and the *Herald Tribune* series should add to our store of information regarding the goings-on north of the border.

## WHAT OTHERS THINK

### Energy Resources and Government

REPRESENTATIVE Wright Patman (Democrat, Texas), chairman of the Subcommittee on Automation and Energy Resources, has released a volume entitled "*Energy Resources and Government*," covering materials submitted to the subcommittee by federal and state regulatory developmental agencies. Representative Patman's subcommittee is part of the Joint Senate-House Economic Committee headed by Senator Douglas (Democrat, Illinois).

The materials continue the studies of energy resources made by the Joint Economic Committee, with an examination of the relationship of government to the regulation and exploitation of energies and fuel.

The introduction to the present volume refers to the hearings which the subcommittee held in October, 1959, at which expert witnesses discussed the prospective demand and supply of energy in connection with our resource base.

At those hearings, the point was made by the various witnesses that a national energy and fuel policy might be desirable. The subcommittee felt that any consideration given to the suggested need for a

national policy should begin with a survey of what the present policy actually is.

WITH this background, the subcommittee wrote the heads of federal agencies and selected state agencies known to be concerned with the production, distribution, or development of energy resources. While the title of this collection is necessarily somewhat broad, the express focus of the inquiry has been to uncover and study the variety and extent of present regulatory activities. It is expected that this publication of the statements submitted by the various federal departments and state agencies will provide a basis for further study of the relationship of government to the energy requirements involved in promoting maximum employment, production, and purchasing power. In the light of agitation for the establishment of a national fuel's policy, this publication should be of interest to gas users or electric utility people.

ENERGY RESOURCES AND GOVERNMENT, Joint Economic Committee, 86th Congress, Second Session, 603 pages, available from the United States Government Printing Office, Washington 25, D. C. Price, \$2.

### Gas Lamps Again Light Cape May, New Jersey

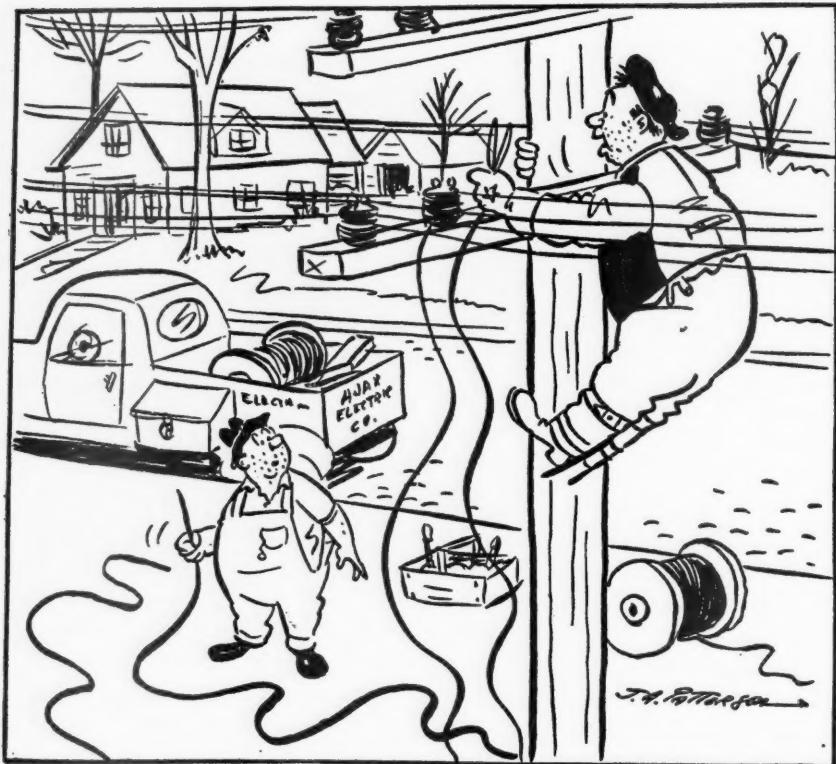
FOR the first time in some fifty years, gaslights are glowing again on the tree-lined streets of New Jersey's southernmost city. Their installation is typical of a nation-wide gaslight resurgence in which dozens of cities have put in new gas street lights, returned old ones to service, or abandoned plans to retire their picturesque gas burners.

The New Jersey Natural Gas Company has installed thirty Welsbach gaslights in

Cape May in a four-block downtown area. More may be added elsewhere in the city next year. More than just nostalgic appeal prompted installation of the lamps. The electric lights they replaced were mounted on tall standards, and heavy tree foliage reduced their illuminating value. The new gas lamps, on nine-foot posts, provide greater horizontal light distribution.

Gas lamps started to come back in 1957. And they came back with a vigor that

## PUBLIC UTILITIES FORTNIGHTLY



"CAN'T FEEL ANYTHING, YET? OK. DON'T TOUCH  
THE OTHER ONE—IT'S 5,000 VOLTS!"

even the most optimistic gas utility people never expected. Today, estimates of the total number of gaslights in service run as high as three-quarters of a million. One singular fact is that the number used outdoors far exceeds the record set in the peak gas-lighting year of 1914, when some 300,000 gas burners illuminated the streets of America's cities and villages.

Contributing to the revival is aggressive selling by manufacturers and gas utility companies, plus the enthusiasm of civic and merchants' organizations, as well as the rediscovered old-time charm of the gaslights themselves.

One of the first new waves of street-light installations was made in April, 1958,

when 64 gas lamps replaced electric lights around the plaza in the heart of Albuquerque's Old Town. Other installations followed in Pittsburgh, Pennsylvania; Orange, New Jersey; New York, New York; Anaheim, California; and other cities.

The demand for street gas lamps of the vintage type has increased to the extent that several manufacturers, including Arkla Air Conditioning Corporation and Hadco Aluminum Products Company, have turned to producing authentic replicas of the old fringe-top lights known as "boulevard" models. And at least 19 other manufacturers are busily making gas lamps for street and private use.

## WHAT OTHERS THINK

A SIGNIFICANT sign of the growing market for gaslights appeared earlier in 1960 when America's pioneer manufacturer of gaslights—the Welsbach Corporation of Philadelphia—returned to production after an absence of more than twenty-five years. A Welsbach spokesman reports his company still serves some 6,500 old gas street lights in at least 30 cities.

Welsbach officials say the largest concentration of old gas street lights is in northern New Jersey, where about 4,000 are in use. Nearly 2,000 light the streets of Cincinnati. The Chicago suburban communities of Riverside and Lake Forest have about 550, and nearly 400 light streets in Worcester and Newton, Massachusetts.

## Notes on Recent Publications

WORLD-WIDE fossil fuel consumption in the year 2000 will be more than five times the consumption in 1958. This is the prediction made by Milton F. Searl in his "Fossil Fuels in the Future," a report released by the Atomic Energy Commission in November. While the study was made at the request of the AEC, it does not necessarily represent the views of the commission. According to Searl, in the forty-two years between 1958 and 2000, we shall have consumed 11.65 quintillion thermal units of heat, whereas up to 1958 the world had only used 3.70 quintillion units of heat. By the year 2000 residents of the U. S. are expected to use four times as much fossil fuel energy as they used in 1958.

This prodigious increase in fuel consumption has naturally raised the questions of energy shortages and high energy costs. However, fossil fuel resources are adequately large. It is estimated they are about ten times the requirements with which the world will be faced in the remainder of the century. These resources, Searl tells us, are predominantly solid fuels instead of the preferred fluid fuels.

He points out that domestic fossil fuel resources are also large in relation to energy requirements. An estimated 28.57 quintillion thermal units of heat remain to be produced, of which 5.57 quintillion are in the low-cost category (not over 25 per cent increase in real prices). Requirements during the remainder of the century are 3.81 quintillion.

The study by Searl does not emphasize energy requirements by fuel type, since, as he points out, technological developments may radically alter consumption patterns before the end of the century.

Searl comes to the conclusion that only moderate increases in real costs will come about during the balance of the century in the prices of fossil fuels and that the energy needs of both the United States and the rest of the world will be met without difficulty. Beyond the year 2000, his report speculates, adequacy of fossil fuel resources is less certain. Although over 90 per cent of the world's fossil fuel resources considered in the study will still be available after the year 2000, continued compounding of fossil fuel requirements at the same rate as predicted for the remainder of this century (slightly over 4 per cent per year) would exhaust fossil fuel resources by the middle of the next century. That time, the year 2050, is within the life span of children now being born.

It is therefore expedient, Searl says, that new sources of power be capable of supplying the increase in energy requirements after the turn of the century.

FOSIL FUELS IN THE FUTURE, 63-page booklet, by Milton F. Searl and emanating from the Office of Operations Analysis and Forecasting, United States Atomic Energy Commission, is obtainable from the Office of Technical Services, Department of Commerce, Washington 25, D. C. Price 75 cents.



## The March of Events

### Pacific Coast Merger Approved

BOARDS of directors of California Oregon Power Company and Pacific Power & Light Company have reached general agreement on the basis for a proposed merger of the two utilities, it was announced recently by A. S. Cummins, president of California Oregon Power, and Paul B. McKee, chairman of the board of Pacific Power & Light, which would be the surviving firm.

"Directors of the companies have reached the conclusion that it is in the best interest of all concerned to join together the two neighboring systems and integrate their power resources and development programs," the announcement said. Construction requirements of the companies in the next ten years were estimated at more than \$500 million, which would be nearly double the present utility plant investment.

The merger would result in a system serving 415,000 utility customers, including 242,000 in the state of Oregon and 21,000 in the adjacent northern California area served by California Oregon's lines. About 65 per cent of the business of the merged company would be in Oregon.

Pacific Power & Light has annual

revenues of \$63 million and serves 323,000 customers in parts of Oregon, Washington, Idaho, Montana, and Wyoming. Its power plants have a generating capacity of 779,000 kilowatts. California Oregon Power, with annual revenues of \$25 million, supplies electric service to 92,000 customers in its southern Oregon and northern California area and has 367,000 kilowatts of generating capacity.

About 400,000 kilowatts of additional hydroelectric development is pending on the two systems, which would increase their combined capacity to more than 1.5 million kilowatts.

Transmission lines of the two systems are interconnected at a point south of Cottage Grove.

Subject to stockholder and regulatory commission approvals, the merger would be effected by an exchange of stock, it was stated. The two boards were reported to have agreed upon an exchange ratio of 1.2 shares of PP&L common stock for each share of California Oregon common.

Details of the proposed consolidation, including provisions for the exchange of preferred stocks, are to be worked out by a joint committee of the directors for submission to the 61,000 stockholders of the companies.

## THE MARCH OF EVENTS

McKee will continue as chairman of the board of the Pacific Company and D. R. McClung as president. Cummins, California Oregon president, and G. L. Jackson, vice president of the southern Oregon firm, would be vice chairmen of

the PP&L board. Other officers of the two companies will serve as officers of the merged company, and most of the members of the California Oregon Power board of directors would serve on the board of PP&L.

## Alabama

### New Government Ownership Area

NEWLY organized Clarke-Mobile Counties Gas District starts to operate early in 1961. It was authorized to begin gas service by the Federal Power Commission in October. The Clarke-Mobile Counties District transmission line starts in northern Mobile county, where it will receive gas from United Gas Pipe Line Company. It will extend northeastward through Jackson and Grove Hill to Thomasville in the northeast corner of Clarke county.

The cost of the new government-owned system is estimated at \$3.8 million. The money is to be raised by an issue of 40-year, 5½ per cent revenue bonds. When the FPC examiner issued his decision in the case, he said the commission's staff did not appear satisfied with the district's original estimates of economic feasibility. But the matter was not pressed, and the application was unopposed.

The area to be served by Clarke-Mobile is one of the last areas in Alabama to be served with natural gas.

## California

### Gas Application Filed

SOUTHERN CALIFORNIA EDISON COMPANY has filed an application with the Federal Power Commission to export natural gas from Texas into Mexico and import gas from Mexico into California. The application was made in connection with a proposed pipeline project approximately 1,600 miles long that will transport gas fuel from Texas Gulf coast and Mexico, through northern Mexico into southern California.

The FPC filing was Edison's second step in seeking regulatory approval of the \$225 million project. On December 5th, the power company applied to the California Public Utilities Commission for approval of agreements with Tennessee Gas Transmission Company, Humble Oil & Refining Company, Petroleos Mexicanos (Pemex), and California Gas Transmission Company.

The gas pipeline proposed will carry up to 455 million cubic feet a day of gas to Edison's steam-electric generating stations. The company stated that the new project would provide it with a future gas supply at a price more stable than that for present sources and would give the southern California market area direct access to two new gas-producing areas.

### Los Angeles' Transit Plans

IT is estimated that the Los Angeles Metropolitan Transit Authority will need a bond issue of \$625 million to cover the cost of building a proposed \$529.7 million rapid transit system. Preliminary plans call for electrically powered surface, subway, and elevated trains on the system.

George W. Burpee, senior partner in the consulting company of Coverdale and

## PUBLIC UTILITIES FORTNIGHTLY

Colpitts, gave the authority's directors a report in which he estimated passenger revenues of \$29 million in 1965 and \$36.8 million in 1980. In the first year of transit operation—1965—he said fares would be about 25 cents for trips averaging three miles, more for longer trips.

The average fare for the system in 1965 would be 45 cents, he said, and 46 cents in 1980.

Operation of the new system would see a maximum use of automation with one-man train crews and mechanized fare collection.

### District of Columbia

#### Interstate Compact Signed

**I**N December an interstate compact was signed which created a single agency to regulate transit service throughout metropolitan Washington. Signers were the governors of Maryland and Virginia and the District of Columbia commissioners.

The action ended five years of negotiating, legal red tape, and political maneuvering. In March, 1961, the new Washington Metropolitan Area Transit

Commission will assume jurisdiction over routes and fares of the D. C. Transit System and three suburban carriers. The commission's three members will be drawn from the utility regulatory bodies of the three jurisdictions. For the greater Washington area, a separate agency has also been formed to develop an area-wide rapid transit system. It is hoped that the new transit setup will result in more efficient and co-ordinated transportation facilities for commuters in the national capital area.

### Kansas

#### Phone Rate Order "Unlawful"

**A**COURT-APPOINTED referee has found an order handed down by the Kansas Corporation Commission, which denied Southwestern Bell Telephone Company a 10 per cent rate increase, to be unlawful and unreasonable.

The phone company, which appealed the commission's order, contended that the commission had erred on 14 points, ten of which the referee held as being unlawful. It was recommended to the court that the "question of the rates would have to be determined by the state

corporation commission to apply the law of Kansas correctly."

The referee claimed that the commission made the mistake of following the law as interpreted from a 1944 federal rate case instead of following the law set out in a 1924 Kansas supreme court case. The principal point at issue was whether the company's rate of return should be computed according to "fair value" investment or according to original investment. The company wanted "fair value," which was upheld in the 1924 Kansas case.

### Maryland

#### Tax Increase Resisted

**A**PLAN to increase the Baltimore city tax on commercial users of gas, electricity, and other utilities from 8 to 10 per cent has been strongly opposed

by industry and commerce in the city, the Association of Commerce reported.

The association said it had been estimated that the boost would mean more than \$1.3 million of additional revenue

## THE MARCH OF EVENTS

over the approximately \$5.4 million obtained from the source under present tax rates.

It was considered that the proposal would slow down the influx of industry to the district and act as a brake on present industry expansion. Industry and business in Baltimore are still recovering

from the impact of the machinery and inventories tax which was imposed in 1958 and is now being progressively eliminated. Baltimore is one of the few cities in the nation that imposes a tax on users of utilities and fuels and the only city that confines the tax to industry and business.

### Missouri

#### OK's 25-cent Transit Fare

THE Missouri Public Service Commission has approved bus and streetcar fare increases for the St. Louis Public Service Company totaling \$1,169,000 annually. The company had requested an increase that would have resulted in \$1,750,000 more annual revenue.

As a result, the basic cash fare goes up to 25 cents. Formerly riders paid 22½ cents on a "four tokens for 90 cents" basis. A number of other special bargain

fares were eliminated and zone surcharges were increased slightly. An increase in the student rate was deferred to prevent higher costs during the present school year. Students now pay 15 cents a ride, plus \$1 for an identification badge which is good for one semester.

Seriously impaired earnings were given as the reason for seeking a fare increase by the transit company. The increase granted is the thirteenth for the transit company since 1946. The last fare boost was in June of 1958.

### Pennsylvania

#### Gas Rates Frozen

PENDING a final decision on Equitable Gas Company's request for an increase of \$3.3 million annually on its gas rates, the state public utility commission has ordered present rates frozen. An earlier nine-month suspension on the proposed boost was due to end January 6, 1961. But the commission said that since the ruling could not be issued by that deadline, it was calling present charges temporary rates in order to further postpone the higher scale.

Under the law, the company can recover, retroactively, any part of the increase ultimately allowed.

The commission claims that Equitable's return on its investment is already well above the prescribed 5 per cent on original costs, less accrued depreciation, but the company contends it needs the addi-

tional revenue to meet higher operating costs. It stated that it would lose \$20,000 a day during the present heating system. Equitable serves 239,000 customers in Alleghany, Armstrong, Butler, Greene, Indiana, Washington, and Westmoreland counties.

#### To Fight Fare Rise

A LIVELY battle has been taking place between the Philadelphia Transportation Company and Mayor Richardson Dilworth in connection with PTC's petition for a fare increase.

The president of the PTC has charged the mayor with working against fare raises and for contributing to the company's enfeebled financial condition. He said the transportation union had scheduled a strike for January 14th unless a labor contract was signed. No pay raise

## PUBLIC UTILITIES FORTNIGHTLY

can be granted, he pointed out, unless PTC is permitted to raise its fares.

It was also charged that the mayor was trying to place the PTC in the position of selling out the company to the city on more favorable terms.

Mayor Dilworth promised that the public utility commission would give due consideration to changes in the PTC's financial structure resulting from negotiations with the Transport Workers Union.

### Agrees to Cut Gas Rate

**T**EXAS EASTERN TRANSMISSION CORPORATION has agreed to voluntarily cut back two wholesale natural gas rate increases by approximately 50 per cent, according to the Pennsylvania Public

Utility Commission. The commission, which has been fighting the increase before the Federal Power Commission, has asked the FPC to approve the lower rates. The state commission said the new rate structure would mean \$10 million in refunds for service from November 10, 1957, through December 1, 1960, for customers of 14 distributing companies.

The Pennsylvania commission also stated that the new rates would cost the distributors about \$4 million a year less than they had been paying. At least eight other utility companies have voluntarily cut their rates in Pennsylvania at the suggestion of the state commission. Largest was that of Pennsylvania Electric Company which rolled back rates \$2.3 million a year.

### Texas

#### Tax Ruled Unconstitutional

**A** "SEVERANCE BENEFICIARY" tax on natural gas has been held unconstitutional by the state third court of civil appeals. The tax is 1.5 per cent of the price paid by the "beneficiary" for gas at the well. More than \$11 million has been paid under protest since the tax went into effect in September of 1959.

The appellate court, by a 2-to-1 majority, concurred with the contention of Transcontinental Gas Pipe Line Corporation and others that the tax violated the commerce clause of the U. S. Constitu-

tion. It is expected that the ruling will be appealed to the Texas supreme court by the commission.

It is considered significant that the court should rule as it did inasmuch as the same court in 1953 upheld the state's natural gas "gathering" tax which the U. S. Supreme Court later declared was unconstitutional. The Texas supreme court upheld the gathering tax.

It is thought that the Texas legislature, which meets this month, might attempt to revamp the severance beneficiary tax to meet the court's objections.

### Wisconsin

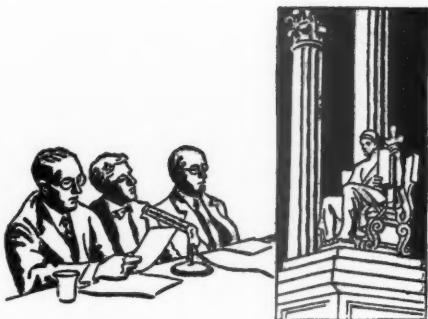
#### REA Makes \$5.5 Million Loan

**T**HE Rural Electrification Administration has agreed to lend \$5.5 million to Dairyland Power Co-operative of La Crosse, Wisconsin, to build 370 miles of transmission lines in the next three years.

Dairyland is the nation's biggest electric co-op and operates nine generating stations.

The co-operative serves 27 electric distribution co-ops which are owned by 101,000 rural families and industries.

The new lines planned by the company will consist of 161,000- and 69,000-volt types that will run through its four-state area. Part of the money obtained will be used to build substations and to install switching equipment.



# Progress of Regulation

## *Trends and Topics*

### Ability to Pay as a Factor in Rate Making

PUBLIC utility rates are based upon the cost of rendering service. Commissions have, however, sometimes taken into consideration factors other than cost, such as the character of service, competitive conditions, and the value of service. Value of service as affecting rates is discussed in 62 PUBLIC UTILITIES FORTNIGHTLY 776 (November 6, 1958). Adequacy of service is discussed in 56 PUBLIC UTILITIES FORTNIGHTLY 903 (November 24, 1955). Another factor is the ability of customers to pay, or the impact of a rate on the community.

#### *Disrupting Effect of Large Rate Increase*

The Ohio commission, in its recent order fixing rates for Ohio Water Service Company, noted that proposed rates amounted to an increase of more than 180 per cent. The commission said that a wholly proper consideration was the impact of any rate order on the business, governmental, and residential consumers. The commission could not "in good conscience" be a party to anything so disrupting to a business and residential community as a tripling or even a doubling of existing rates for water service (35 PUR3d 385).

The Georgia commission, in authorizing a revision of gas rates, refused to make effective an increase in cost of gas to present commercial space-heating customers until after the present heating season, in view of the fact that the majority of these customers were apartment house customers whose rents had been frozen for several years and who could not absorb increased costs. Proposed increases for charitable or privately supported orphanages or higher educational institutions were deemed unreasonable, and existing rates were frozen in their application to these users, since they were supported largely from limited funds and any substantial increased costs would impose upon them an unreasonable burden (68 PUR NS 23).

The Massachusetts commission said that in a rate proceeding it should take judicial notice of current business conditions so far as they relate to the ability of customers to absorb any additional rates (83 PUR NS 238).

## PUBLIC UTILITIES FORTNIGHTLY

In the words of the Maine supreme judicial court, the commission, in determining rates for an electric company, must strike a nice balance between the essential revenue needs of the company and the value of the service to the ratepayer and his ability to pay (7 PUR3d 1).

### *Fares beyond Reach of Public*

The New York commission, in fixing rates for the Rochester Transit Corporation, took the position that the public should not be burdened by a rate structure so high that it becomes oppressive. It said that it could not engage in endless and fruitless efforts to preserve the solvency of companies subject to its regulatory powers, in which course lies no solution for the pressing problem of obtaining more revenue. If the tendency to increase operating costs should continue uninterruptedly, no act of the commission could preserve either the regulated company or the public from serious injury (79 PUR NS 129).

The Wisconsin commission, however, said that it was powerless to withhold a rate increase from a transit company with insufficient earnings because of the possibility that an increase might put fares beyond the reach of those who of necessity must rely upon public transportation (91 PUR NS 82).

### *Economic Depression*

In Oregon an increase in the minimum charge for gas to small consumers was refused at a time when the country was "faced with one of the worst economic depressions recorded" and an increase would work a hardship. Other objections were also made to the proposed charge (2 PUR NS 277).

As the result of a prolonged economic depression, with many persons unemployed in a community where water rates had been increased, the Alabama commission ordered former rates to be put into effect until such time as the new rates could be adopted without working too great a hardship upon the community. The company had advised the commission that it would not appeal from such an order (PUR1931B 392). Likewise, the necessity of water service and the ability of the public to pay during a period of economic depression were held by the Indiana commission to be pertinent factors when it reduced rates in an emergency proceeding (PUR1933B 290).

The Washington supreme court, however, declared that public service companies are not eleemosynary institutions, and they cannot be compelled to devote their property to a public use except upon the well-recognized basis of a fair and reasonable return, notwithstanding the economic distress of their customers. Only through general taxation in common with all taxpayers can they be compelled to contribute to the relief of the distressed (7 PUR NS 14).

### *Agricultural Conditions*

The Idaho commission, in suspending increased warehouse rates, rejected a contention that the farmer's ability to pay could not be considered (1 PUR

## PROGRESS OF REGULATION

NS 46). But the same commission made the statement in a more recent case that the level of telephone rates in a farm area cannot be predicated upon the level of farm income, even though such income is relatively low because of generally depressed economic conditions (22 PUR3d 490). The Minnesota commission also took the position that the fact that prevailing market prices for agricultural produce were unusually low was no justification for reducing telephone rates to a point which would deprive the company of its return (PUR1932E 414).

The Utah commission said it was impressed with the plea that power should be furnished to irrigation projects at the lowest possible rates consistent with cost, in order that irrigated agriculture might be fostered (PUR1921C 294). The California commission, in fixing motor carrier rates for transportation of milk and cream in 1945, when the national price stabilization policy was in effect, took into consideration the fact that the rate-payers were operating on a narrow and controlled margin of profit (62 PUR NS 321).

### *Rates Not Dependent on Ability to Pay*

The California supreme court said that inability of customers to pay reasonable rates does not justify the fixing of rates which would be unjust to the public utility and insufficient to pay the cost of maintaining its operating plant (20 PUR NS 199). Mere inability to purchase the services furnished by a public service enterprise, said the Illinois commission, can form no justification for requiring rates to be unreasonably low (PUR1921D 95). The Ohio commission, in a 1933 case, declared that rates cannot be fixed upon the ability of the consumer to pay since the law provides such a rate shall be fixed as to give a just return for property used and useful in supplying service (PUR1933D 163).

The New York commission, many years ago in fixing a service charge, said that the law did not require a company to serve the small consumer at less than cost at the expense of those who are better able to pay (PUR1918C 675). The Pennsylvania commission took the position that, in determining how much various classes of consumers should pay in view of the characteristics of their use and the costs incurred to render services with those characteristics, it cannot take into account what individual consumers in each class can pay (51 PUR NS 248).

The Montana commission, in denying reduced fares for school children, said that while streetcar service might be worth nothing to one who cannot pay, the utility cannot be compelled to meet his necessities (PUR1921C 857).

A city cannot escape liability for its reasonable share in the necessary increases in rates of an electric and water company, according to the West Virginia commission, by showing that it is financially unable to meet any increases in its expenses because of already laying the maximum levy allowed by law (PUR1920F 198). The same commission said that even when it is burdensome to a city to pay for fire protection, this is not a legal or just defense to a charge for such protection (PUR1924C 159). The fact that a

## PUBLIC UTILITIES FORTNIGHTLY

city is sustaining a large deficit in the operations of its subway, according to the New York commission, does not supply any basis for lower rates for electric service to the municipal transit system. This opinion was expressed in a rate case involving Consolidated Edison Company of New York (97 PUR NS 49).

### *Review of Current Cases*

#### Gas Rate Decision Deals with Working Capital, Weather, Expenses, and Merchandising

THE Michigan commission granted a gas rate increase which would produce a return of 6.66 per cent on the average net plant rate base. In so far as the user is concerned, the commission said, rates are just and reasonable when they are neither oppressive nor permissive of exorbitant and speculative profits for utility investors. In so far as the utility is concerned, they are just and reasonable when sufficient to cover all the reasonable cost of doing business, including interest on the bonded indebtedness and a fair dividend on the equity invested in the plant. Rates must also be sufficient to safeguard the community's long-term interest in a certain service by preserving the financial health of the utility.

##### *Rate Base*

The commission used average net plant rather than end-of-period net plant for rate base purposes. It rejected the company's contention that an amount representing manufactured gas plant being amortized should be included. This plant had been dismantled and was no longer being used to provide service.

##### *Storage Field*

Notwithstanding a staff contention that the value of a storage field should be excluded from the rate base because the

company had not developed the field for storage in the ten years since it had been purchased, while other fields had been developed for that purpose, the commission included it. The records showed that 90 per cent of the total investment represented the cost of base gas in the field, which could be withdrawn and used by the company. Since it was so available, the commission regarded it as a part of the company's investment, either in plant or working capital, without regard to the status of the field itself. Since the item represented so large a percentage of the total investment, it was not necessary to make an actual ruling on the staff's assertion of developmental lag.

Contributions made by customers for construction of facilities were excluded.

##### *Working Capital*

The company had included a working capital requirement equal to forty-five days of operation and maintenance expenses and 10.11 days of natural gas purchases. These expense allowances, the commission noted, should not be confused with cash requirements since they represent money spent, not money on hand, and are thus in addition to cash. The staff argued that this requirement should be omitted from the working capital allowance.

## PROGRESS OF REGULATION

The company, on the other hand, argued that only 60 per cent of the federal income tax accrual should be offset against the working capital allowance since the dates for payment of federal income taxes for corporations had been advanced so that the accruals made to meet such payments were no longer on hand for the same period of time as formerly prevailed.

The commission rejected both the staff's omission of allowances for operation and maintenance expense and purchased gas costs and the company's adjusted book balances in the federal income tax liability account to eliminate unusual conditions and to restate such accruals on the claimed percentage of actual availability. Resolution of matters considered and determined in prior orders, said the commission, ought to be on the same principles adopted.

Deviation from prior principles would result in inequities to either the ratepayer or the utility.

### *Operating Revenues*

Resolution of the controversy over operating revenues necessitated a consideration of the weather that could be expected to occur in the future when the rates fixed by the order were in effect. The warmer the weather the lower would be the company's operating revenues. Expressed another way, the company's ability to earn a fair rate of return depended upon whether the weather approximated that assumed in fixing its rate.

The commission felt that a representative average figure should be used in lieu of the actual degree-day deficiency for a particular test period. It adopted a ten-year average as a basis for calculating test-year revenues, and made an adjustment to compensate for the change in Btu content of purchased gas.

### *Social and Service Club Dues*

The cost of participating in state and local chambers of commerce was allowed as an operating expense. However, employee memberships in service and social clubs were held not an appropriate charge to ratepayers.

### *Advertising and Promotion Expense*

The commission allowed expenditures for advertising in educational, entertainment, and social publications, and for a motion picture relating to the company's new office building. The company had contended that it did not engage in merely "courtesy advertising" but received full value for its advertisements. The motion picture was part of a continuing program by the company to encourage the economic development of the city and the state.

### *Donations and Contributions*

Contributions made by the company to organized charities such as the community chest and torch fund were not recognized as an operating expense. The company had strongly urged that the commission should allow such expenditures because the contributions were often made on a quota basis and were both a business necessity and a public relations benefit. There may be merit in that position, said the commission, but there had not been a sufficient showing to justify the conclusion that the burden of charitable contributions should be borne by the consumer and not by the investor.

### *Wages*

Due to a decline in the number of employees, wage increases were applied to the number of employees at the end of the test period, rather than those in the company's employment during the test year.

The commission also accepted the staff's

## PUBLIC UTILITIES FORTNIGHTLY

computation of depreciation and amortization expenses, based on plant actually in use during the 12-month test period, instead of the company's figures based on end-of-year plant.

### *Merchandising Activities*

The company had urged the commission to follow an incremental cost approach, in determining expenses charged to merchandising, rather than an allocation of joint costs. It contended that merchandising activities did not necessarily increase overall expenses, and, if discontinued, the operating expenses of the natural gas system would not be reduced. The commission disagreed. It held that the company's merchandising activities should bear a fair share of joint costs.

Losses resulting from the sale of appliances below cost to employees, builders, and dealers were considered part of the appliance sale operation and not chargeable to natural gas operation.

### *Uncollectible Accounts*

Allowance for uncollectibles, pointed

out the commission, should reflect or be related to those to be expected from each current year's sales rather than those incurred for prior years' sales. In this way, the current ratepayer would pay only the current cost of operation and the future ratepayer would not be saddled with losses related to prior years. The allowance, therefore, was based upon the extent to which losses would be suffered as a result of sales made in the test period. The commission noted that it was determining the future level of expenses and not the level which prevailed during the test period.

### *State Franchise Tax*

The Michigan franchise tax had been increased, the increase effective during the latter part of the company's test period. Since the change in the corporation franchise tax constituted a known factor, the future effect of which could be determined and annualized, the commission adopted the increased amount as the allowable expense. *Re Michigan Consol. Gas Co. Case No. U-122, November 23, 1960.*



### Separate Directories Permitted

THE Massachusetts commission granted a telephone company permission to abandon the issuance of its Boston and vicinity alphabetical directory and to publish and distribute four directories instead, each covering a part of the metropolitan area. The increasing size of the metropolis had made the single directory large and unwieldy.

It was desirable to have larger print in the directories. The apparent calling habits of customers had been carefully analyzed by the company, and coincided with the proposed geographic divisions. All the area directories would be available to subscribers who desired them. *Re New England Teleph. & Teleg. Co. DPU 13398, December 7, 1960.*



### Municipal License Tax Held Burden on Interstate Gas Transmission

A FEDERAL appeals court ruled that a municipal license tax was inapplicable to the business of distributing natural gas to industrial consumers within the

## PROGRESS OF REGULATION

city of Mobile, Alabama, where delivery was the terminal act of transportation from without the state. The license was made prerequisite to the distribution of gas in Mobile, and it carried injunctive and criminal sanctions. The tax was measured by gross receipts. It was held to be a burden on interstate commerce.

United Gas Pipe Line Company brings gas into the Mobile area from Mississippi and Louisiana. Near the city, the pressure of the gas is reduced. The gas is then either sold to Mobile Gas Service Corporation or delivered into its lines. United has contracted with Mobile Gas to distribute and meter gas in the city of Mobile, even to United's own customers.

Ideal Cement Company and Scott Paper Company are industrial customers of United within the Mobile taxing jurisdiction. They have contracted to reimburse United for all taxes which might be levied upon and paid by United. After paying the municipal gross receipts tax for several years, United sought reimbursement from the two customers.

### *Uninterrupted Flow*

The court could find no point subsequent to the entry of the gas into Alabama at which this interstate commerce was transformed into intrastate commerce, or even rendered separable from interstate commerce. The mere fact that the gas moved from pipelines owned by United to pipelines owned by Mobile Gas, without more, was not a realistic separation. There was no change in the commodity. Nor was the reduction in pressure before entering the city a sufficient change. The flow of gas was continuous.

It was contended that the city of Mobile could validly tax sales of gas by United to Scott and Ideal. That this may be true, the court agreed. But the city did not attempt to tax United's sales in Mobile, nor the use of the gas, nor United's property in Mobile. In this instance, the city made the procurement of a license a prerequisite to engaging in interstate commerce within its jurisdiction. The code provided for injunctions against those who fail to pay municipal license taxes on time, so that interstate commerce may be brought to an immediate halt by means of the injunctive remedy. Moreover, doing business without a license would bring criminal sanctions down upon the violator. *Ideal Cement Co. et al. v. United Gas Pipe Line Co.* 282 F2d 574.

**Uninterrupted Flow**

The court could find no point subsequent to the entry of the gas into Alabama at which this interstate commerce was transformed into intrastate commerce, or even rendered separable from interstate commerce. The mere fact that the gas moved from pipelines owned by United to pipelines owned by Mobile Gas, without more, was not a realistic separation. There was no change in the commodity. Nor was the reduction in pressure before entering the city a sufficient change. The flow of gas was continuous.

It was contended that the city of Mobile could validly tax sales of gas by United to Scott and Ideal. That this may be true, the court agreed. But the city did not attempt to tax United's sales in Mobile, nor the use of the gas, nor United's property in Mobile. In this instance, the city made the procurement of a license a prerequisite to engaging in interstate commerce within its jurisdiction. The code provided for injunctions against those who fail to pay municipal license taxes on time, so that interstate commerce may be brought to an immediate halt by means of the injunctive remedy. Moreover, doing business without a license would bring criminal sanctions down upon the violator. *Ideal Cement Co. et al. v. United Gas Pipe Line Co.* 282 F2d 574.

## Maryland Commission Adheres to Depreciated Original Cost

THE Maryland commission has refused to depart from the use of a depreciated original cost rate base as representing fair value for rate-making purposes. A gas company seeking a rate increase had presented trended original cost and reproduction cost figures.

In the commission's opinion, the determination of a rate base arrived at by the use of either trended cost or reproduction cost would, in an inflationary econ-

omy, allow a company to reap a return on dollars never invested in plant and would require customers to pay for dollars never spent. In a reversed situation, with prices and costs declining, the company would be denied a return on dollars actually invested in plant.

### *Attrition Increment*

Notwithstanding the determination that depreciated original cost would be used

## PUBLIC UTILITIES FORTNIGHTLY

to determine the rate base, the commission did add an attrition increment to the rate base to compensate for the adverse effects of inflation. The increment approximated the net additions to plant during the current year. In effect, the commission was utilizing a year-end rate base.

The increase granted would produce a return of 6.5 per cent on the depreciated

original cost rate base. Customer advances for construction were excluded from the rate base computation, as was the reserve for deferred federal income tax, stemming from the company's election to use liberalized depreciation. The commission considered the latter in the same category as depreciation reserve. *Re Cumberland & A. Gas Co. Case No. 5671, Order No. 54506, December 5, 1960.*



### Optional Electric Rates to Trailer Park Owners

THE California commission directed Pacific Gas and Electric Company to file a new electric rate tariff for trailer park service which would give park operators the option of being billed under a general service rate or a domestic multiplier schedule. A small park owner had complained that he had been incurring a loss by the existing tariff requirement that he purchase electricity at the general service rates and resell it to his park tenants at the domestic rates.

The company had countered with a proposal to serve trailer park tenants directly in the same manner as though they were individually metered domestic customers residing in single family dwellings in the area. Under this proposal, the park owner would be required to grant the company rights of way for its distribution facilities, and would be required to arrange wiring within the park in compliance with all laws to permit installation of groups of meters at mutually agreeable locations. The company planned to read all meters on its regular monthly reading cycle and to render separate bills for each meter.

The commission pointed out that the company's proposal would solve the problem as far as new trailer parks were concerned. Such parks could be wired to take

advantage of the utility's proposal. However, operators of existing parks would have to expend considerable sums to rewire their premises. It would not be reasonable or fair to force the operators to make a choice as to whether to expend a considerable sum to rewire premises or to continue to lose money in the resale of energy under their existing schedules, the commission said.

The complainant, on the other hand, had requested that he be billed for the energy he resold on a straight domestic service schedule. The commission rejected this proposal, pointing out that, depending upon the number of tenants and amount of energy involved, the park operator would be collecting revenues based upon rates for one energy block of the domestic schedule and purchasing the energy at a lower rate from another energy block of the same domestic schedule.

#### *Multiplier Schedule*

The most reasonable solution, the commission held, was the multiplier type of schedule. The staff had proposed that an optional schedule be provided to permit a trailer park to receive all its energy on a master meter domestic multiplier-type schedule. The commission accepted this view, and held that energy used in the

## PROGRESS OF REGULATION

park for the convenience and benefit of the trailer occupants, including energy for general lighting, washrooms, park maintenance, and similar usage which a usual domestic customer would use, constituted domestic usage.

Certain functions, such as an administrative office and a sign, had commercial aspects. The utility estimated approximately 13 per cent of the energy would have to be allocated to such commercial functions. The commission held, though, that this small amount of commercial usage might appropriately be included within an optional multiplier schedule at domestic schedule rates. But it pointed out that stores, restaurants, service stations, and other distinct and separate commercial functions operated at any trailer park would not be included. Such separate activities would be separately metered in

accordance with applicable rate tariffs.

### *Multiplier Units*

Another factor which had to be determined was the number of units to be used in establishing the multiplier. The commission recognized that such a schedule would result in savings to the utility, due to the elimination of separate meters and services and separate meter readings and billing to each trailer unit. However, in view of the commission's inclusion of a small portion of possible nondomestic service in the master meter domestic schedule, it was reasonable to direct that the number of units in any individual case should be the number of trailer spaces at which electrical energy was offered. *Monroe et al. v. Pacific Gas & E. Co. Decision No. 61139, Case Nos. 6096, 6211, November 23, 1960.*



## Rate Settlement Reflecting Reduced Supply Cost Precludes Later Escalation for Cost Increase

**I**N view of a settlement agreement between Mississippi River Fuel Corporation and several utility customers providing for an automatic decrease in rates to customers in the event of a decrease in the pipeline's supply cost, the federal appeals court held that the pipeline company could not thereafter inject into the settlement agreement an automatic escalation in the resale rates to offset a subsequent supply cost increase. There was no provision in the settlement agreement for such an increase in resale rates. Any upward revision would be made only by proper proceedings under § 4(d) and (e) of the Natural Gas Act.

Mississippi recognized that it was obliged to cut its resale rates, under the agreement, to reflect a decrease in the cost

of gas from its supplier, but the supplier obtained a provisional increase shortly after its rates were reduced.

Mississippi contended that it need reduce its resale rates only during the period of the effective supply cost reduction. The court observed, however, that nothing in the customer settlement agreement limited the period for which the resale rate reduction would run. Nor did the settlement provide for a cessation of Mississippi's obligation to its customers in the event the settlement rate should be superseded.

Merely because Mississippi's customers provided for a reduction in their rates, they did not thereby also agree to an automatic self-executing escalation of such rates in the event Mississippi was sub-

## PUBLIC UTILITIES FORTNIGHTLY

jected to a subsequent supply cost increase. In seeking to withhold the resale rate reduction from the time the supply cost was increased, said the court, Mississippi in effect attempted to procure a unilateral rate increase without following the procedures of the Natural Gas Act.

### *No Evidentiary Hearing*

Mississippi urged that the commission's order was promulgated without a hearing and was, therefore, invalid. But the court found no need for an evidentiary hearing. The only question before the commission was whether Mississippi's proposed refund and rate reduction were in full compliance with the terms of the

Mississippi-customer settlement, and this was a question of law, dependent upon interpretation of the settlement agreement. Mississippi's interpretation was plainly stated in a letter to the commission and later in briefs for rehearing.

The customers, interveners in the proceeding, pressed a different viewpoint. The issue was fully stated and no questions of fact were presented. In essence, said the court, all Mississippi lost was the privilege of making an oral argument to the commission, and this does not amount to a deprivation of due process or a violation of the Natural Gas Act. *Mississippi River Fuel Corp. v. Federal Power Commission*, 281 F2d 919.



## Favored-nation Clause Operative As to Initial Buyer Despite Partial Contract Assignment

**A**FEDERAL appeals court ruled that sellers under a residue gas sales contract were entitled to file price increases pursuant to a favored-nation provision where the buyer, Oklahoma Natural Gas Company, had partially assigned the contract to another buyer and then proceeded to purchase other gas in the contract territory at a price in excess of the contract price. The court reversed Federal Power Commission orders which refused to accept price increases filed by the sellers, and directed the commission to accept the filings.

The commission contended, in effect, that the assignee was substituted for Oklahoma Natural and that the favored-nation clause could be activated only by the assignee's purchases. The latter made no other purchases in the area covered by the favored-nation clause.

The court observed that the assignee acquired only "the right to receive and the obligation to pay for certain volumes

of residue gas purchase contracts," and that this included the obligation of the favored-nation clause. The rights of the sellers could not be diminished by an assignment, and the necessary requirements for a novation were not present.

### *Review Power*

The commission urged that its interpretation of the favored-nation clause is a matter peculiarly within its competence and that judicial review is limited to considering only whether the administrative determination is reasonable. The rule had no application in this case, the court decided, pointing out that the refusal of the commission to accept the rate filing was based on its construction of the contract provisions and the application of ordinary principles of contract law, and not upon the commission's experience in the administration of the Natural Gas Act. *Warren Petroleum Corp. et al. v. Federal Power Commission*, 282 F2d 312.

## PROGRESS OF REGULATION

### Pipeline's Temporary Certificate Meets Requirements Of Gas Purchase Contract

A FEDERAL appeals court affirmed a district court holding that American Louisiana Pipe Line Company, in securing a temporary certificate, sufficiently met its obligation under a gas purchase contract with Gulf Oil Corporation to preclude the latter from canceling the contract. The parties had agreed that Gulf might cancel if the pipeline company failed within six months to obtain "such authority as may be necessary to enable it to expand the certificated capacity of its line." Gulf claimed that this authority meant a permanent certificate and contended that it was entitled to cancel because American Louisiana had not secured permanent authority.

At the time this contract was entered into, the Federal Power Commission had never refused a permanent certificate once it had issued a temporary one, and over \$600 billion of construction had been carried forward under temporary certificates.

The appeals court agreed with the lower court that the temporary certificate obtained by American Louisiana within the allotted time constituted the "requi-

site authority" within the sense of the contract.

Furthermore, even if the parties had contemplated a permanent certificate, Gulf was still precluded from canceling. In the negotiations leading to the sales contract, Gulf had agreed to delete from its draft of the contract a provision which would condition its obligation upon a commission determination, to be made at the time of deciding its certificate application, that the proposed contract price for gas was just and reasonable. Nevertheless, upon applying for a certificate, Gulf embodied this provision in its application. Since the applications of both American Louisiana and Gulf were processed jointly, the introduction of the price issue by Gulf naturally delayed the issuance of a permanent certificate to the pipeline company. Gulf knew or should have known the effect of its action on the price question, and it could not rely on the delay which it brought about by its own conduct to justify its cancellation of the contract, the court declared. *Gulf Oil Corp. v. American Louisiana Pipe Line Co.* 282 F2d 401.



### "Adverse Precedent" Rejected as Grounds For Intervention in Rate Proceeding

LYNCHBURG GAS COMPANY failed to state a sufficient case for judicial review of orders of the Federal Power Commission relating to intervention in a rate proceeding involving Manufacturers Light and Heat Company, a federal appeals court ruled. Referring to § 15(a) of the Natural Gas Act and commission rules and regulations thereunder, the court noted that as a minimum requirement to assert

a right of intervention, there must be a showing that some interest of the petitioner will be directly affected. Lynchburg Gas was unable to show a direct interest.

The commission initially denied Lynchburg's petition to intervene, but on rehearing allowed intervention. Lynchburg purchases its gas from Atlantic Seaboard Corporation, a subsidiary of Columbia Gas System. Manufacturers is also a sub-

## PUBLIC UTILITIES FORTNIGHTLY

sidiary of Columbia. Except for the fact that Manufacturers and Atlantic Seaboard are both subsidiaries of Columbia, there is no connection between Lynchburg and Manufacturers. Lynchburg sought review on both the order denying intervention and the final order in the rate proceeding. Only the issue of rate of return was contested in the rate case.

The court pointed out that Lynchburg's rights were not finally determined in the initial order denying intervention. The second order negated the effect of the first one and permitted Lynchburg to participate as a party. Being a party, it had the right to seek review of the final rate order, so that if it was aggrieved by the way the commission handled the petition to intervene it could obtain relief on review of the final order.

### *Not Aggrieved by Rate Order*

On the second petition, which sought

review of the final order, the prime question was whether Lynchburg had the right to intervene. The alleged right was predicated on the theory that a decision in the Manufacturers' rate proceeding might create an adverse precedent as to subsequent proceedings between Lynchburg and its direct supplier, Atlantic Seaboard. In support of this theory, Lynchburg asserted that the commission, having once determined the proper rate of return for one Columbia System subsidiary, has applied that identical rate of return to all of the other subsidiaries.

The court rejected this argument. The setting of the rate of return in the Manufacturers' case would not preclude Lynchburg from offering such evidence as it might desire in rate proceedings filed by its direct supplier. Lynchburg was, therefore, not aggrieved by the order relating to Manufacturers' rates. *Lynchburg Gas Co. v. Federal Power Commission, Nos. 13,170, 13,285, November 23, 1960.*



## Gas Pipeline Expansion Authorized Along with Underground Storage Involving Distributing Companies

THE Federal Power Commission has authorized natural gas pipeline projects for Trunkline Gas Company and Mississippi River Transmission Corporation and has approved producer sales, subject to a price condition, to supply the projects. Trunkline, the primary applicant in this case, whose pipeline extends from gas fields in the Gulf area to the Indiana-Michigan border, proposed to loop and enlarge its existing facilities at various points by installing 155 miles of main line and 69 miles of supply line costing some \$25 million. The new facilities will expand the company's capacity to 605,000 Mcf per day, an addition of 95,000 Mcf.

Trunkline's objective is to initiate service to new customers consisting of Mississippi River Transmission (a newly formed subsidiary of Mississippi River Fuel Corporation), 50,000 Mcf per day contract demand; Northern Indiana Public Service Company, 20,000 Mcf per day contract demand; Central Illinois Electric & Gas Company, 1,600 Mcf per day contract demand; and the city of Rensselaer, Indiana, 2,000 Mcf per day contract demand. Trunkline will also increase deliveries to four of its existing utility customers. A further phase of Trunkline's expansion, involving additional service to Panhandle Eastern Pipe Line Company, will be heard by the commission later.

## PROGRESS OF REGULATION

Transmission proposed to construct 93 miles of 18-inch line from a connecting point on Trunkline's system in Illinois, wherewith to transport gas to Laclede Gas Company and Illinois Power Company for resale in the greater St. Louis area and southwestern Illinois. As an aid in this project, Transmission proposed to develop and operate the St. Jacob field in Illinois as an underground storage reservoir.

### *Market Demand*

The commission had no difficulty in approving the gas supply, facilities, financing, and markets for Trunkline's project. The supplies to Transmission will help relieve long-standing and acute deficiencies in gas supply in the areas served by Laclede and Illinois Power. The project will provide gas for the St. Jacob storage, which will afford peak-period supplies for Transmission's resale customers.

Trunkline's service to Northern Indiana Public Service Company will alleviate mounting gas deficiencies and pressure inadequacies on the distributing company's northwest system. This service will save Northern Indiana an expenditure of about \$12 million for new facilities to alleviate the pressure deficiencies. Coal interveners urged that Trunkline gas might, by displacement, free a portion of the present supply on Northern Indiana's northwest system for interruptible sales in the Calumet-Gary area during off-peak periods. They feared that this service might result in "unnecessary boiler fuel and other inferior uses" of gas. The company, on the other hand, suggested that some of the additional volumes which might become available for interruptible sales would be used in its storage operations. The commission decided in favor of certification.

### *Trunkline's Rates*

Trunkline will render service at existing rate levels, which are presently effective subject to refund. The staff and Consumers Power Company urged, however, that a condition be imposed requiring reduced rates in the company's Zone 2, reflecting claimed reduced unit costs resulting from greater utilization of Zone 2 facilities. This zone embraces the recent northernmost extension of Trunkline's system, through which the pipeline company furnishes 135,000 Mcf per day to Consumers. It was contended that increased deliveries, including the sale of 20,000 Mcf to Northern Indiana, would produce significantly lower costs per unit of gas delivered in Zone 2, warranting a rate reduction.

The commission refused to impose a rate condition, noting that the reasonableness of Trunkline's rates, including Zone 2 rates, is at issue in pending rate proceedings. All services authorized in this proceeding under existing rate schedules are subject to refund. Furthermore, rate evidence in this certificate proceeding was deficient, and the pending rate proceedings would afford an inherently more favorable opportunity to determine rate issues.

### *Transmission's Pipeline and Storage*

Transmission's pipeline facilities, to serve Laclede and Illinois Power, will cost somewhat in excess of \$6 million. The St. Jacob storage facility will cost an estimated \$1,394,000. The staff recommended that a cost-of-service form of rate for Transmission's pipeline service be prescribed in lieu of the demand-commodity rate proposed by the company substantially in accordance with the Atlantic Seaboard formula. The commission rejected this recommendation, indicating that a

## PUBLIC UTILITIES FORTNIGHTLY

cost-of-service type rate schedule was not warranted. However, Transmission was required to file a new tariff based on third-year operations rather than first-year operations. A rate of return of 6½ per cent was considered adequate for Transmission. This assumed a cost of debt of 5.25 per cent, with a resulting rate of return on equity of 10.3 per cent.

The St. Jacob storage proposal is an intercompany project. Laclede and Illinois Power will provide base gas for the facility during its development. Laclede will be entitled to 63.75 per cent, Illinois Power 11.25 per cent, and Mississippi River Fuel 25 per cent participation and utilization of the storage capacity as it develops. Pointing to the relatively high cost of meeting peak demands directly from a pipeline, Transmission testified that tremendous savings would result to consumers from the 31 billion cubic foot capacity of the storage facility.

But the staff recommended denial of the storage proposal. First, it thought certification was unwarranted until further tests were made to prove the likelihood of success. Second, it contended that too much of the risk of failure of the project, as well as an undue share of operating costs, would fall upon Laclede and Illinois Power.

Considering the benefits and detriments to each of the parties, the commission found that no one party was being required to assume an inequitable portion of the risk of the venture. It appeared that the risk falling upon Laclede and

Illinois would be less than they would have assumed in developing their own storage.

Under the cost-of-service rate schedule, for storage service, Transmission would receive only a return on its declining investment. But consistent with the commission's prior practice, only temporary authorization of the storage field would be granted at this time, pending further development and testing. A condition was attached, in accordance with the meaning of the parties' agreement, limiting the risk of Laclede and Illinois Power, in the event of failure, to their proportionate share of unrecoverable base storage gas. The condition further provided that these customers would not be liable to compensate Transmission for further development expenses should Transmission be unable to perform storage service.

### Producer Rate Condition

Three producers who proposed to furnish gas to Trunkline from southern Louisiana fields for these pipeline projects sought an initial price of 22 cents per Mcf exclusive of tax. The commission conditioned authorization of their sales on a price of 21.5 cents exclusive of tax, or a total price of 23.25 cents including tax. This action was consistent with the recent First Amendment to Statement of General Policy No. 61-1, October 25, 1960. *Re Trunkline Gas Co. et al. Opinion No. 339, Docket Nos. CP-60-22 et al. November 29, 1960.*

## Other Recent Rulings

*Construing Commission Orders.* While the commission is not prohibited from construing its own orders, the ultimate

authority to construe them rests with the courts, the Alabama supreme court pointed out in a case involving a proposed

## PROGRESS OF REGULATION

extension of motor carrier authority. *Smith Transfer Co., Inc. v. Alabama Pub. Service Commission et al.* 123 So2d 28.

*Intermediate Decision.* The Federal Power Commission ruled that the intermediate decision procedure may be omitted despite objections by one or more parties. *Re Northern Nat. Gas Co. et al. Docket Nos. G-19040, G-19041, October 12, 1960.*

*Gas Service Held Feasible.* The Missouri commission held feasible the proposed construction of facilities to provide gas service to several communities where it appeared that satisfactory financing was assured, that gas service would be cheaper than competitive fuels, and that the return on the project to the company would be about 1.39 per cent for the first year, 5.34 per cent for the second, and 7 per cent for the third. *Re American Gas Co. Case No. 14,535, October 11, 1960.*

*Rate Case Settlement.* The Ohio commission approved a settlement offered by the Dayton Power and Light Company whereby a proposed rate increase of 22 per cent in a village adjoining Dayton would be reduced by more than one-half, resulting in a rate of return of 3.56 per cent for the village area. *Re Dayton Power & Light Co. Case No. 27,321, October 28, 1960.*

*Judicial Review Groundwork.* The U. S. court of appeals held that, although the federal government was entitled to have an ICC determination that a domestic rate was applicable to a rail shipment judicially reviewed, the case should be remanded to the lower court to determine if the federal government had taken the necessary statutory steps to protect and

preserve its right to judicial review of the commission's order. *United States v. Chesapeake & O. R. Co.* 281 F2d 698.

*Rentals by Railroad.* The U. S. district court held that the Interstate Commerce Commission had not erred in requiring a railroad to increase rentals at its warehouse where the evidence showed that the railroad's rental program did not measure up to prevailing market rental practices. *Southern R. Co. et al. v. United States et al.* 186 F Supp 29.

*Private Antitrust Actions.* The U. S. district court held that railroads which were members of an association could be held individually responsible, in private antitrust actions for treble damages and an injunction, for unlawful conspiracy in restraint of trade only if the individual railroads were shown to have known and approved of the activities and unlawful objectives of the association. *Riss & Co. v. Association of American Railroads et al.* 187 F Supp 306.

*Not Private Carrier.* The U. S. district court held that an arrangement whereby an experienced transportation man contracted with shippers to lease trucks for the shippers' use, select the drivers, make the schedules and routings, establish the destination agents, and distribute amounts sent to him by the shippers among a rental company, the drivers, and himself was a "for hire" operation subject to the Interstate Commerce Commission's regulatory authority, not a private carrier operation. *Allen et al. v. United States et al.* 187 F Supp 625.

*Railroad Agencies Retained.* The Florida supreme court sustained a commission order which denied permission to discontinue a railroad agency and a railway ex-

## PUBLIC UTILITIES FORTNIGHTLY

press agency at Ormond Beach, even though the business could be handled through the Daytona Beach agency five miles away, in view of commission findings that the savings from discontinuance of the agencies (which operate at a profit) would be relatively insignificant, and that the public convenience would be better served by their continued operation. *Butler et al. v. Carter et al.* 123 So2d 313.

*Stationing of Carrier Equipment.* The Florida supreme court sustained the commission in authorizing a motor carrier of household goods to station equipment at Gainesville in addition to the principal place of domicile at Marianna, where the commission found, on the basis of economic and factual data, that such authority would permit more expeditious and convenient service to the public. *Gainesville Bonded Warehouse, Inc. v. Carter et al.* 123 So2d 336.

*Duty to Serve.* The Pennsylvania superior court held that a municipal authority was not relieved of its obligation to provide service to consumers simply because the private line to which the consumers were connected was no longer used to serve the owner of the line. *Yesioro et al. v. North Fayette County Municipal Authority et al.* 164 A2d 129.

*Showing of Inadequate Service.* The Utah supreme court held that an applicant seeking additional motor carrier authority had to show that the existing service was not adequate and convenient and that his proposed operation would eliminate the inadequacy and inconvenience. *Salt Lake Transfer Co. et al. v. Utah Pub. Service Commission et al.* 355 P2d 766.

*Gas-distributing Company Return.* The Indiana commission considered a 6 per cent return fair for a gas-distributing company. *Re Natural Gas Service, Inc.* No. 28674, October 21, 1960.

*Seasonal Water Charges.* The California commission authorized a water company to file new tariffs for seasonal and short-term customers which would provide an annual minimum charge of \$60 with a \$30 charge for each additional room or unit. *Re Donner Lake Utility Co. Decision No. 60952, Application No. 41957, October 25, 1960.*

*Electric Rate Increase.* The California commission granted the California Oregon Power Company an electric rate increase, applicable to its operations within California, which would produce a return of 4.14 per cent on the California portion of the operations and 5.16 per cent on the total system operation. *Re California Oregon Power Co. Decision No. 60949, Application No. 42209, October 25, 1960.*

*Rates Increase after Dial Conversion.* Stanton Independent Telephone Company has been authorized by the Nebraska commission to increase rates sufficiently to provide a rate of return of 6.26 per cent on a net book value rate base upon conversion to dial service. *Re Stanton Independent Teleph. Co. Application No. 22442, October 26, 1960.*

*Pension Cost.* The Georgia commission held that the cost of a utility's pension plan for employees is allowable for rate-making purposes provided such cost is not excessive to the ratepayer. *Re Commerce Teleph. Co. File No. 19343, Docket No. 1580-U, November 16, 1960.*

CONTINUING TO SERVE BUSINESS AND INDUSTRY

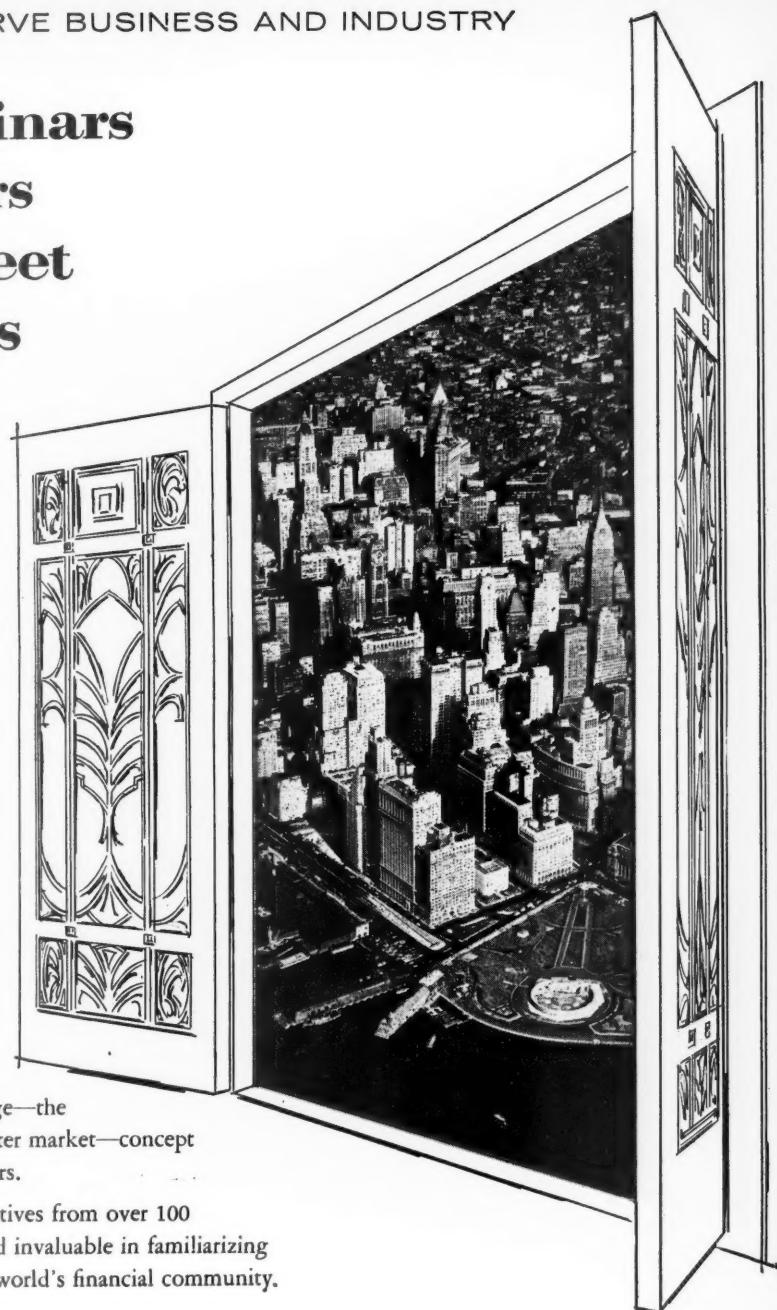
# Irving seminars open the doors of Wall Street to Utilities

On Wall Street, Irving specialists study with new and sound techniques—with seminars, for example, designed to provide the special insight demanded by this rapidly growing Utilities. In addition to meetings with Irving specialists, these seminars offer contact with experts from the many fields of the Wall Street community. These experts who actually make the Irving seminars possible.

is a brief list of some of the topics Irving opens for Public Utility executives during a Seminar:

Review of rating agencies—explanation of the functions of the investment trust—operations of the stock exchange—the bond dealer and the over-the-counter market—concept of regulation—cost-of-capital—and others.

It is a typical week that utility executives from over 100 companies across the country have found invaluable in familiarizing themselves with the ins and outs of the world's financial community.



## IRVING TRUST COMPANY

One Wall Street, New York 15, N.Y.

Capital Funds over \$150,000,000

Total Assets over \$1,700,000,000

GEORGE A. MURPHY, Chairman of the Board

WILLIAM E. PETERSEN, President

Public Utilities Department—JOHN F. CHILDS, Vice President in Charge

MEMBER FEDERAL DEPOSIT INSURANCE CORPORATION



## AT RENO . . . two MU-60 peaking plants

Two Electro-Motive MU-60, 6000 KW, Peaking Plants are installed back-to-back at Reno—first such installation in the country. This installation illustrates the building-block capabilities of the basic Electro-Motive Plant design.

## AT CARSON CITY . . . peaking plant in place in 19½ hours

The third Sierra Pacific Peaking Plant, installed at Carson City, demonstrates the high mobility and flexibility of the Electro-Motive equipment. Starting at 8:00 a.m., on October 3, the Electro-Motive MU-60 scheduled for Carson City was loaded from rail cars onto low-boy trailers for the 35 mile trip to Carson City. By 5:00 p.m., the following day, all equipment was unloaded and placed in position.





# *To meet winter peak demands . . .*

## **SIERRA PACIFIC POWER CO. ADDS THREE ELECTRO-MOTIVE PEAKING PLANTS**

The Sierra Pacific Power Company is meeting anticipated 1960-61 Winter peak demands with 18,000 KW generated by two new 6,000 KW Electro-Motive Peaking Plants installed at Reno, and a third plant installed near Carson City, Nevada.

**PEAKING POWER COMES FIRST**—Base load power supply on the Sierra Pacific system is purchased from Pacific Gas and Electric Company and is transmitted across the Sierra-Nevada range from Summit substation 40 miles west of Reno. In addition, Sierra Pacific Power Company supplements this base load with four small hydro plants with about 9,000 KW capacity. With the addition of the three Electro-Motive Peaking Plants, Sierra Pacific is putting peaking power first, in their six year plan of system expansion, to meet load growth and peak demands.

Sierra Pacific expects winter peaks on the system ranging up to 136,000 KW during the months of November through February. Peaks will occur between 5:00 and 7:00 p.m., and will require Peaking Plant operation of one to four and a half hours daily.

**REMOTE CONTROL OPERATION**—The Electro-Motive Peaking Plants are remotely controlled from the system dispatch center at Reno. The dispatch center is located 35 miles from the Carson City installation and three miles from the Reno Peaking Plants. Remote supervisory control allows the Peaking Plants to start up, synchronize, go on the line and operate unattended. Output of the units is fed directly into a bus through a transformer connected to the system base supply.

**ECONOMICAL PEAKING POWER**—The total installed cost of the three Sierra Pacific Peaking Plants (including site preparation and all auxiliary equipment) was below estimate, and considerably below the cost of base load generating equipment designed to do the same job. Decentralized Electro-Motive Peaking Plants were the lowest cost solution to Sierra Pacific's immediate problem.

For complete information on how Electro-Motive Peaking Plants can solve your system problems, ask your Electro-Motive Representative.



**ELECTRO-MOTIVE DIVISION  
GENERAL MOTORS** La Grange, Illinois

**Offices:** Chicago, New York, St. Louis, San Francisco

**In Canada:** General Motors Diesel Limited, London, Ontario

P.U.R.

# EXECUTIVE

*This advertisement is neither an offer to sell nor a solicitation of offers to buy any of these securities. The offering is made only by the Prospectus.*

NEW ISSUE

January 10, 1961

## 655,733 Shares Lone Star Gas Company Common Stock (\$10 Par Value)

Holders of the Company's outstanding Common Stock are being offered rights to subscribe at \$40 per share for the above shares at the rate of one share for each ten shares of Common Stock held of record on January 5, 1961. Subscription Warrants will expire at 3:30 P.M., Eastern Standard Time, on January 23, 1961.

The several Underwriters have agreed, subject to certain conditions, to purchase any unsubscribed shares and, both during and following the subscription period, may offer shares of Common Stock as set forth in the Prospectus.

*Copies of the Prospectus may be obtained from any of the several underwriters only in States in which such underwriters are qualified to act as dealers in securities and in which the Prospectus may legally be distributed.*

### The First Boston Corporation

Kuhn, Loeb & Co.	Merrill Lynch, Pierce, Fenner & Smith <small>Incorporated</small>	Smith, Barney & Co
Blyth & Co., Inc.	Goldman, Sachs & Co.	Harriman Ripley & Co <small>Incorporated</small>
Kidder, Peabody & Co. <small>Incorporated</small>	Lehman Brothers	White, Weld & Co. <small>Incorporated</small>
Dominick & Dominick	Drexel & Co.	Dean Witter & Co
Tucker, Anthony & R. L. Day	First Southwest Company	Goodbody & Co.
Rauscher, Pierce & Co., Inc.	Schneider, Bernet & Hickman, Inc.	Chaplin, McGuiness & Co.
Dallas Union Securities Co., Inc.	Eppier, Guerin & Turner, Inc.	McKelvy & Company
Moore, Leonard & Lynch	Rotan, Mosle & Co.	Singer, Deane & Scribner
R. A. Underwood & Company, Inc.		

A fast-reading, weekly letter from Washington, devoted to developments in the Nation's Capital and state news of national significance affecting Public Utilities.

Dependable forecasts of what lies ahead in the utility field.

### Annual Subscription \$50

Public Utilities Reports, Inc.  
332 Pennsylvania Bldg.  
Washington 4, D. C.

Diego 0  
0,000  
LECTIN  
n of the  
Diego Ga  
0 year e  
y 329,90  
stomers  
2,600, re  
nd total  
onsidera  
ed in th  
, but wa  
provide  
thousan  
mers, th  
0,000. G  
4,500,00  
ation an  
f the firs  
unit a  
Plant,  
previous  
total g  
company's  
00 kilow  
000 kilow  
scheduled  
will inv  
proximat  
0,000 we  
tion of a  
on pipel  
delivera  
in Dieg  
0 were  
of three  
rt of t  
ralizatio  
ucker a  
ost. In  
18,000  
ission an  
transmi  
substati  
ution s  
eseeing  
need fo  
an Dieg  
has set

Y 19, 1961

# Industrial Progress



## Diego Gas & Electric Plans \$10,000,000 Expenditure in 1961

LECTING the continuing growth of the San Diego area, the Diego Gas & Electric Company by year end was serving approximately 329,900 electric and 267,300 customers, an increase of 14,100 and 6,600, respectively over the 1959 end totals. This customer gain considerably less than that experienced in the record-breaking 1959, but was yet substantial.

provide the facilities to serve thousands of gas and electric users, the utility spent about \$10,000,000. Of this amount, more than \$4,500,000 were invested in the erection and placement in operation of the first 142,000 kilowatt generating unit at the new South Bay Plant, on which \$18,000,000 previously been spent. This total generating capability of company's four power plants to 500 kilowatts. There was also \$10,000,000 outlay for the second 100 kilowatt unit being installed scheduled for operation in 1962, will involve a total expenditure approximately \$19,000,000. About \$10,000 were expended on the installation of a 52-mile, 30-inch transmission pipeline, doubling the pipe-deliverability of natural gas to San Diego area. In excess of \$1,000 were spent for the construction of three operating headquarters part of the operating division's centralization program for bringing quicker service to customers at cost. In addition to all this, more than \$18,000,000 were allotted to the expansion and strengthening of electric transmission and distribution substations, and the gas main distribution system.

Forecasting an ever-increasing customer need for electricity and natural gas, San Diego Gas & Electric Company has set a preliminary 1961 cap-

ital expenditure budget of \$29,000,000. A major item in this many-million-dollar expansion program is \$10,550,000 to be used for continuing construction of the second South Bay Power generating unit. Other major expenditures include another \$1,000,000 for three more operating headquarters and many millions of dollars for electric transmission and distribution lines, substations, and gas main distribution projects.

## Baltimore Gas & Electric to Spend \$250,000,000 in Next 5 Years

THE Baltimore Gas and Electric Company recently announced that its construction outlays over the next five years will exceed \$250,000,000. The utility states that it expects to spend approximately \$45,000,000 of this amount in 1961 to keep pace with population growth and the ever-increasing needs of present customers. New facilities required to handle this growth over a five-year period are estimated to increase its investment in plant by nearly 50 per cent.

During 1961, approximately \$36,000,000 will be devoted to electric construction. Included in this total is a figure of \$19,000,000 for new generating capacity and associated transmission facilities. The remainder will be spent largely on expansions and improvements to the company's transmission and distribution systems.

In the last ten years Baltimore Gas and Electric has more than doubled its electric generating capacity. Under construction is its new Charles P. Crane station where the first 191,000 kilowatt steam-electric unit is scheduled for commercial operation in the early summer of 1961. Work is under way on a second unit of the same size. With these additions the company will have almost one and a half million

kilowatts of steam-electric generating capacity.

More than \$7,000,000 will be expended for the utility's gas construction and expansion program. Work has begun on a new propane storage cavern which, when completed, will become a part of the company's peak shaving operations. About \$1,000,000 is estimated to be spent on this project in 1961. Almost all of the remaining amount will be for the extension and development of the gas distribution system. Another million and a half dollars has been marked for properties used jointly by both the gas and electric divisions.

The company serves a territory of 2,283 square miles. It expects an additional 10,000 gas customers and 14,000 electric customers to be added in 1961.

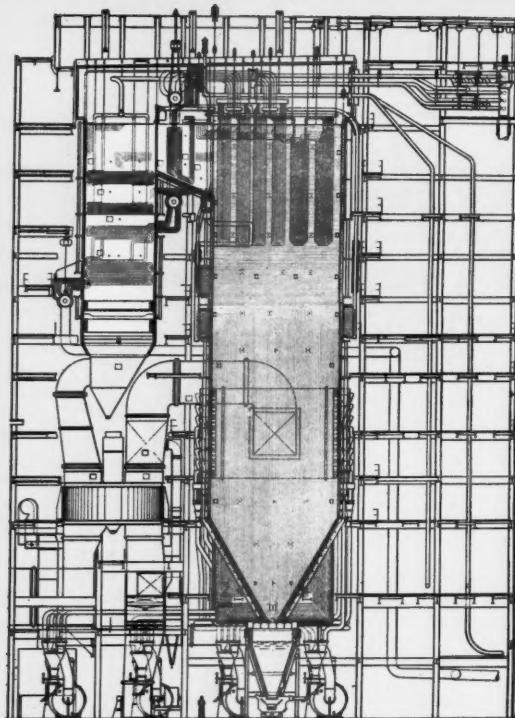
Of the construction outlays during the period 1961-65, Baltimore Gas and Electric estimates that about 80 per cent will be scheduled for development of the electric system, and some 17 per cent for the gas system and the balance for miscellaneous facilities. By the end of this period, the company's total utility plant investment will be more than three-quarters of a billion dollars.

## EDP Industry Seen Headed For Period of Biggest Growth

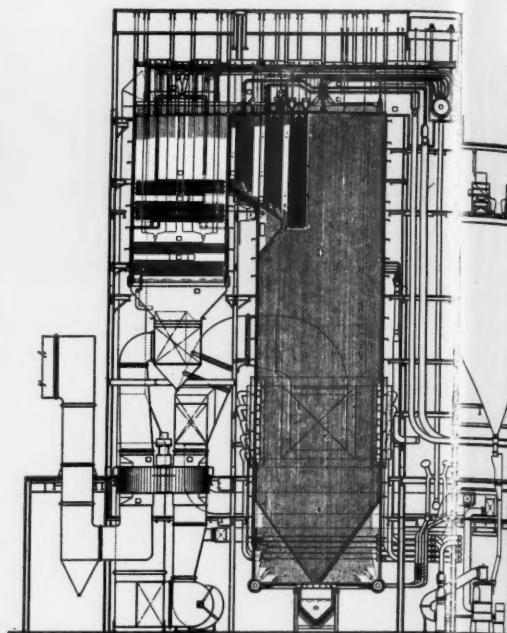
THE electronic data processing industry in 1961 and the immediate years to follow will experience its most rapid growth since the invention of electronic computers, according to Walter W. Finke, president of Minneapolis - Honeywell's Electronic Data Processing Division.

"The industry's growth, which may become almost explosive in nature as we move farther into the decade of the sixties, will be across the board—in business, industrial, scientific, engineering, governmental

(Continued on Page 28)



The unit pictured here represents the most advanced power plant cycle yet attempted. This boiler, a C-E Sulzer Monotube Steam Generator, is designed to deliver 1200 F steam at a pressure of 5000 psi to a 325-megawatt turbine-generator. The unit employs a double reheat cycle (1050 F - 1050 F) and has a primary steam flow of 2,000,000 lb per hr. It went on the line in February, 1960.



This boiler, a C-E Controlled Circulation unit, serves the world's first 500-megawatt turbine-generator. Designed for a primary steam flow of 3,850,000 lb per hr, it delivers 1050 F steam (1000 F reheat) at 2450 psi. It was placed in service in 1960.

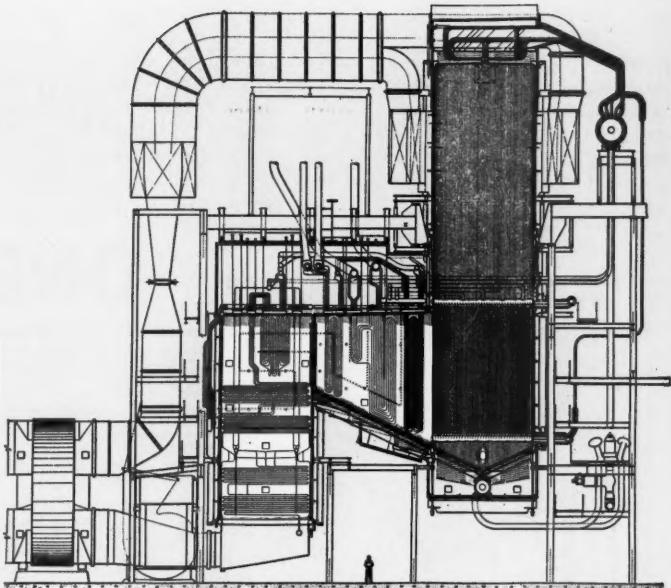
# PROFILES

During the year 1950, Combustion installed some 40 utility boilers, representative of the complete range of power practice at that time. The average turbine capacity was 50 megawatts . . . the largest, 120 mw. All boilers were of natural circulation design, only two used reheat, only two had design pressures as high as 1800 psi. By contrasting these statistics with those of the boilers shown above, the length of the strides taken in the last ten years can be more fully appreciated.

A broader picture of current practice is revealed

by the following data relative to 1960 C-E utility installations, which now serve nearly 4,000 mw of power capacity. Six of these new boilers power turbines 225 mw and above, the largest serving a 500-mw turbine. All but two are designed for pressures in excess of 1800 psi . . . all employ reheat . . . about 60 percent are of Controlled Circulation design. More than 70 percent of the units serve turbines with capacities from 150 mw up. In fact, the average unit size is more than three times that of ten years ago, and the largest is substantially

own here are three C-E boilers, each which represents an advanced design except. Their major points of difference concern capacities, cycles, configurations — considerations of major import to the industry's continuing effort to keep power costs down. As indicated by picture captions, one unit (far left) the world's highest pressure boiler represents the most advanced and efficient cycle yet attempted in power plant practice. Another (left) is the world's largest boiler, serving the first 300-megawatt turbine-generator to go into service. Both of these units went "on the line" in 1960. Although different in design, both follow the same general pattern which has long been characteristic of large C-E utility boilers. The third boiler (right) represents a marked departure from this classic arrangement. Because of the flexibility of its C-E Controlled Circulation design, heating surfaces can be placed in almost any desired position. Thus, it becomes possible to effect sizable savings in structural steel, floors, platforms, piping, earthquake-proofing, as well as in the boiler itself.



This new look, made possible by the flexibility inherent in C-E Controlled Circulation design, holds much promise of bringing new first-cost economies to power plant practice. This reheat boiler is designed to deliver 1050 F steam (1000 F reheat) at 2400 psi to a 300-megawatt turbine-generator. It has a primary steam flow of 2,305,000 lb per hr.

# S of Power Progress

C-E utility power plants now have four times the capacity of the biggest unit of 1950. During the last decade, the vocabulary of the power plant has been enlarged with the addition of such words and phrases as "skin casing," "divided furnaces," "skin furnaces," "panel wall," "welded wall," "subcritical," "supercritical," "platen," "pressurization." They account, in large measure, for the fact that, while generating costs have risen considerably over the last 10 years, the average net production cost per kw-hr is substantially less today than it was in 1950.

**COMBUSTION  
ENGINEERING**



C-298A

General offices: Windsor, Connecticut  
New York offices: 200 Madison Avenue, New York 16

## INDUSTRIAL PROGRESS—(Continued)

(Continued from page 25)  
and military applications," he said. "The most substantial growth, however, will be in business and industrial data processing."

He said the "new generation" computers, now being delivered in volume, have the speed, versatility and economy of operation to efficiently handle practically all of the paper work, procedural and mathematical problems found in business, industry and science.

"The result is that the new computers today have the ability to serve as the 'work horse' of EDP in business and industry for many years to come," he said. "This is a healthy situation in the current phase of the EDP industry's evolution."

Mr. Finke explained that the manufacture of EDP systems in 1960 became America's newest billion-dollar-a-year industry. He predicted that by 1965 value of output will rise to \$3 to \$5 billion.

"The years immediately ahead be highlighted by a ground swell increasing understanding of EDP and the many things it can do better for the unaided man," he said.

"EDP is a young industry, less than a generation old. In its short history it has experienced a technological revolution in the field from vacuum tubes to transistors. Yet, in this short time electronic computation has progressed to a point where it is hard to see how it could get along without it."

He said that EDP's major business will be to increase the productivity of office workers, by 14%, making an indispensable contribution to handling the increasingly vast amount of paper work confronting business and industry.

Finke said that Honeywell's CO 2-ton-based EDP Division made a delivery of the first commercial unit of the Honeywell 800 general purpose electronic data processing systems in December.

### VEPCO Continues Expansion Program

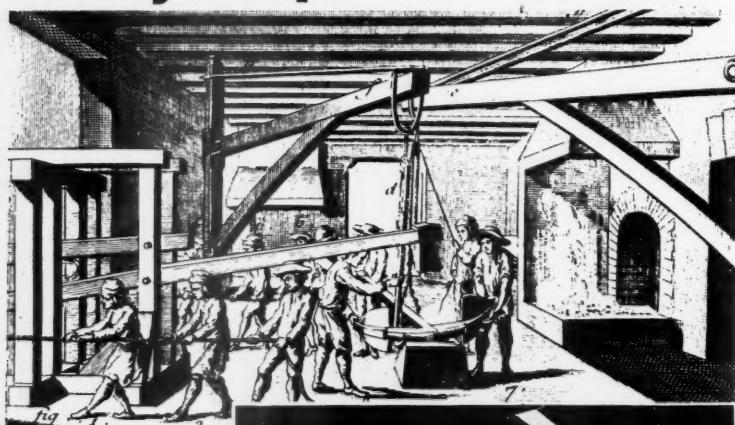
VIRGINIA Electric and Company gained 18,700 electric customers and 3,000 gas customers in 1960, and now has approximately 761,000 electric and 100,000 gas customers.

Veepco spent approximately \$600,000 for the construction of facilities in 1960.

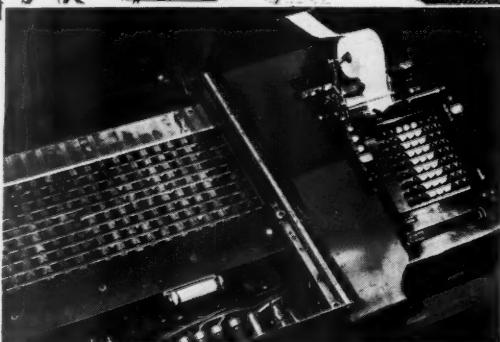
Work is progressing on site at the company's 200,000 kilowatt hydroelectric generating station on the Roanoke river in North Carolina. The \$50,000,000 project, about eight miles upstream from the company's present Roanoke hydro station, is scheduled for completion in 1963.

Two new generating units are under construction at two of the company's major steam generating stations. The company's Possum Point station, near Quantico, Virginia, 200,000 kilowatt unit is being built. A 200,000 kilowatt generating unit at the Portsmouth power station will increase the total generating capacity of that station to 550,000 kilowatts. The new units at both stations are scheduled for completion in 1964.

## many steps vs. "ONE"



An anchor is being forged here. The three-man-to-a-side crew, tugging alternately on the two ends of a rope, spin a geared flywheel which supplies power to the triphammer.



This exclusive R & S service is made possible by this machine of our invention

It is a needless and costly tug-of-war finding the time for your personnel to compile rate bill analyses, when our "One-Step" Method can do the job faster, better and more economically.

The triphammer production speed and accuracy of "One-Step" monthly rate bill analyses offer two-fold advantage to rate engineers: 1. always up-to-date figures on present consumption can be safely geared to future operational planning; 2. the widely recognized validity of our analyses are a definite plus in preparing and presenting rate cases.

Change-over to the "One-Step" Method is easy, and your personnel is not involved in compilation—all the work is done in our office. The full story is in our booklet, "One-Step" Method of Bill Analyses.

**A note to Dept. U-4 will bring your copy**

**RECORDING & STATISTICAL CORPORATION**

100 Sixth Avenue • New York 13, N. Y.

**Earth Anchors Catalog**  
Published By Pieper-Lill

FOUR-PAGE price and technical Bulletin 760 on P-L guy wire anchors has been published by Pieper-Lill

## INDUSTRIAL PROGRESS—(Continued)

Division of Jasper Blackburn immediately after installation, St. Louis. A ground sample information is provided of the three types of P-L steel available: expanding, dome-plate and nail. The installed screw type.

Information furnished on the 28 items of old. It is available include prices, experienced areas, physical dimensions and utilization in the holding strength in soil types. It is to range from sand to hard-pan. Also at time listed are construction details and progressions of information.

Copy of the bulletin will be forwarded upon request from Pieper Division of Jasper Blackburn Corporation, 1525 Woodson road, St. Louis, Mo.

### Philco Announces New Model in the Philco 2000 Computer Series

Honeywell CO Corporation recently announced a new model computer in its commercial 2000 electronic data processing line. The 800 general processing models in the line.

Known as Model 212, it is a general-purpose computer designed to meet the data processing needs of businessman, scientist and engineer.

neer, according to John M. Nisbet, marketing manager of Philco's Computer Division.

"Significant design improvements have produced a balanced computer with faster circuits and new logical organization," Mr. Nisbet explained. "Starting with a simplified console the new Philco 212 sets a new industry pace for speed, efficiency, flexibility and economy of operation."

Mr. Nisbet pointed out that the Model 212 is compatible with other Philco 2000 computer models.

"The Model 212 is the next step in the succession of Philco 2000 series," he said, "and does not outdate earlier models. Programs and routines used on Models 210 and 211 can be run on the Model 212 without reprogramming. Ease of programming is assured by the availability of TAC, ALTAC and COBOL compilers. The addition of this new central processor to current installations illustrates that asynchronous Philco 2000 systems need never become obsolete."

The new computer model has faster circuits with diode transistor logic and improved internal organization. These features make it a full four

times faster than Model 211 and other Philco computers. The Model 212 can multiply two 48-bit words in under ten microseconds, including access times. Maximum access time for a pair of instructions is one microsecond. Under normal conditions, access time is considerably less than one-half microsecond per instruction.

### Northern Illinois Gas Orders H-800 Computer

NORTHERN Illinois Gas Company has signed a contract with the Minneapolis-Honeywell Regulator Company for an H-800 computer, according to W. J. Crowley, vice-president and comptroller of the utility.

Delivery of the data processing system early in 1963 will coincide with the scheduled completion of the utility's general office building in Aurora.

First use of the new system will provide more efficient billing and accounting for the rapidly growing customer list—expected to be about 800,000 in 1963.

The new computer also will make

(Continued on page 30)

# timing...

**From their experience on hundreds of rate cases, large or small, experts from Stone & Webster know the importance of timing... and can help you time your next rate action properly.**

A new free booklet called "Rate Service for Public Utilities" tells in detail how Stone & Webster Service Corporation has helped other utilities and how we can assist you in every phase of your rate problems.

Write for it today.

**STONE & WEBSTER SERVICE CORPORATION**

90 Broad Street, New York 4, New York

## INDUSTRIAL PROGRESS—(Continued)

possible improved accounting methods for the huge plant investments planned for the utility's service area. Payroll and other accounting applications, including maintenance of the files of approximately 110,000 stockholders, will be scheduled to follow later.

"The new computer system will permit better scheduling of work and is readily expandable so that future growth will not require frequent, expensive change-over costs from one system to another," Mr. Crowley said. "In addition, it will have sufficient capacity to assist in solving the many engineering, economic and research problems that we must solve to provide sound decisions for future actions.

"The operating efficiency to be gained by using this latest management tool," he added, "is another step in line with NI-Gas' policy of providing the best possible service in the most economical manner."

### Pacific Tel. & Tel. Plans \$365 Million Outlay

PACIFIC Telephone & Telegraph Company plans to spend about \$365 million in 1961 on service improvement and expansion.

In a year-end statement President C. O. Lindeman said: "This large construction program is the most tangible evidence we can offer of our confidence in the soundness of the economy of the Pacific West and in the future growth of our industry."

### H. Zinder & Associates Names Vice President

FRANK P. SAPONARO has been named a vice president of H. Zinder & Associates, Inc., consultants and engineers specializing in the power and energy industries. Mr. Saponaro has been with the Zinder organization since August 1958.

Prior to joining H. Zinder & Associates, Mr. Saponaro was vice president of Algonquin Gas Transmission Company, and before that was manager of the rate department of Texas Eastern Transmission Corporation. From 1942 through 1950 he was with the Federal Power Commission and served as head of that agency's rate filings and contract analysis section. Prior to that he was head of the rate section of the Rural Electrification Administration.

H. Zinder & Associates maintains offices in Washington, D. C., New York City, Houston, Dallas, Seattle,

San Francisco and Los Angeles. Services are provided to natural gas and oil production companies, gas transmission and distribution companies, electrical utilities, industrial concerns and financial institutions. The firm serves also as consultant to state and local governments and to industry associations.

### Montana-Dakota Utilities to Start Expansion in March

MONTANA-DAKOTA Utilities Co. plans to start a \$10.5 million expansion of its generating station at Mandan, N. D., in March, Cecil W. Smith, president, announced recently.

Addition of new generating, boiler and auxiliary facilities will more than triple capacity of the plant, the company said. When the new equipment is in operation in the fall of 1963, the plant will have a rated capacity of 91,000 kilowatts compared with 25,000 now, the company said.

### Philadelphia Electric's Expansion Is Determined by Area's Long-term Growth

PHILADELPHIA Electric's expenditures in 1960 for new and expanded facilities amounted to about \$78 million. Expenditures of \$73 million are planned for 1961. During the five-year period, 1961-65, construction outlays are expected to be in the neighborhood of \$450 million.

The magnitude of this long-range expansion and improvement program reflects Philadelphia Electric's confidence that mounting demands for electricity, gas, and steam in Greater Philadelphia will continue. Long-term trends, rather than temporary declines in the pace of business, have consistently influenced the company's planning.

Eddystone electric generating station is now in operation on the Delaware river near Chester. This giant station, a vital addition to the PE system, houses about one-fifth of the company's generating capacity. The first 325,000-kilowatt generating unit is designed to operate at a supercritical pressure of 5000 pounds per square inch and a temperature of 1200 degrees Fahrenheit. This unit is capable of producing one kilowatt-hour of electricity from only six-tenths of a pound of coal, which represents a significant achievement in the art of power generation. A second highly efficient unit, which also has a rated capacity of 325,000 kilo-

watts, is now in operation at stone.

Philadelphia Electric is playing a leading role in the atomic power field as sponsor of one of the major projects for the peaceful development of the atom. A non-profit organization known as High Temperature Reactor Development Associates, Inc., comprising fifty-two investor-owned utilities, are together with Philadelphia Electric conduct the research and development work associated with this project. Plans are well advanced for construction and operation of a high-temperature, gas-cooled reactor PE system at Peach Bottom, Lancaster County, Pennsylvania. Applications have been made to the Atomic Energy Commission for a construction permit, and conferences are presently being held with the Commission to determine the requirements of the procedure.

The rapid growth of PE's business in the four suburban areas outside Philadelphia stems from the trend to gas house heating. Residential sales of gas for heating have more than tripled in the past ten years, and now account for almost two-thirds of total gas sales.

Steam heating sales in downtown Philadelphia are continuing to increase as urban redevelopment needs and new office building and apartment houses are built.

### G-E Building New Advanced Computer Research Laboratory

PLANS for establishment of an advanced computer development and research laboratory at Sunnyvale, Calif., 39 miles south of San Francisco, were announced recently by Clair C. Lasher, general manager of the General Electric Company's computer department. Construction of the laboratory is expected to start in the spring with occupancy by General Electric laboratory personnel scheduled for December, 1961.

Mr. Lasher said construction of the new laboratory is another indication of General Electric's expanding activity in the computer industry. Computer department recently announced plans to open 11 new information processing centers and additional sales offices across the nation. A continuing increase in personnel is also underway. Mr. Lasher believes continuing research in techniques and applications is necessary if "the computer industry is to attain its potential."

## INDUSTRIAL PROGRESS—(Continued)

## 1960 Year-end Review of the Peoples Gas System

NSION projects completed during 1960 by the Peoples Gas System increased its daily delivery capacity to 2 billion 89 million cubic feet of gas. In year-end review, Eskil I. Bjork, chairman of Peoples Gas Light and Coke Company, parent company in the system, pointed out that these projects added 260 million cubic feet to maximum day delivery capacity. Of the total, 185 million was provided by expansion of long-distance pipelines and 75 million by an increase in the daily withdrawal rate from underground storage reservoirs. Bjork said that gross capital expenditures during the year were \$99,000,000. This compares with \$60,000,000 for 1959.

total investments since the beginning of 1951 by companies in the Peoples Gas system total \$546,000, Mr. Bjork stated. During this 10-year period, peak day delivery capacity of the system was increased by 1 billion 205 million cubic feet or 136

present daily delivery capacity of the long-distance pipeline subsidiary is 1 billion 439 million feet. The storage project, which initially began operation in 1953, now augments pipeline flow gas 10 million cubic feet on peak demand days.

1.5 million cubic feet per second. By stems during the last year Peoples Gas completed its plan as housekeeper of pipeline subsidiaries. On October 1 of gas for Natural Gas Pipeline Company of America took than tripled the assets and operations of its affiliate, Peoples now account Coast Natural Gas Pipeline Company. Mr. Bjork of total gas in the reorganization will result in greater flexibility iles in down- eteration and a stronger gas supply situation.

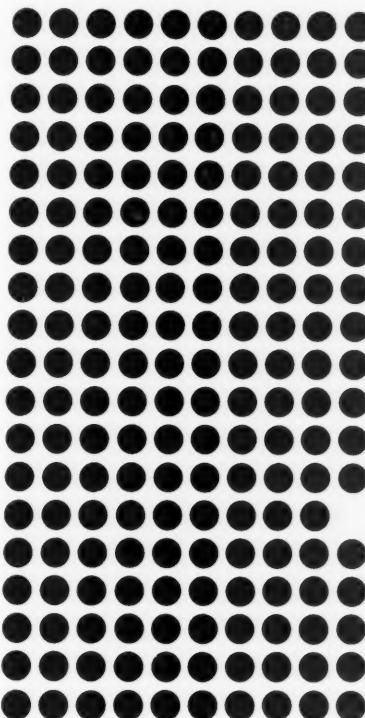
Continuing development in building areas built. Natural Gas Pipeline expanded the delivery capacity of pipelines from the Texas Panhandle by 100 million cubic feet per day and its pipeline to the Texas Coast by 85 million feet at a total cost of \$69,000,000.

With the additional supplies of natural gas which were available to it through these subsidiary expansion programs, Peoples Gas was able to offer gas heating service to all customers in all classifications on its waiting lists desiring such service as of December 31, 1960.

San  
ed recent  
eral mana  
Company's  
Construction  
ected to  
pany by  
peles Gas added 4,083 tons of gas-fueled air con-  
ing equipment to its lines during the first 11  
as of 1960 to bring the total tonnage of such  
ment served as of November 30 to 19,862 tons.  
gas air conditioning equipment of 5,430 tonnage  
been authorized and is awaiting delivery and  
ation.

expansion projects scheduled for 1961 by pipeline storage subsidiaries, which will provide an aggregate of 171 million cubic feet of gas per day, are awaiting Federal Power Commission authorization.

# WHAT IS A TEMPORARY ENGINEERING SPECIALIST?



It depends. At Commonwealth, he is one of 190 registered Professional Engineers on call to help clients with special problems. These engineering specialists are available to your company whenever specialized talent, extra manpower or depth of experience is needed.

# Commonwealth

## **SERVICES INC**

## ASSOCIATES INC.

## Management Consultants

## Professional Engineers



New York, N. Y. Jackson, Michigan

**Houston, Texas    Washington, D. C.**



(Continued on Page 32)

## INDUSTRIAL PROGRESS—(Continued)

general—and Atlantic City Electric in particular—advanced substantially toward the level of power-producing capability expected by the end of the decade.

Mr. Hayward said that new company construction projects including the new \$27 million B. L. England generating station at Beesley's Point, New Jersey, was a major item in construction plans that totaled \$116 million which had been budgeted by the company for the next five years. The Accounting and Data Processing Center, on the Black Horse Pike near Pleasantville, New Jersey, was completed last June and takes its place as one of the most advanced installations of its kind in the business world today. A new transmission line connecting Philadelphia Electric Company and Atlantic City Electric Company went into service December 5th and provides an additional source of electricity to the rapidly growing western portion of the company's service area.

By the end of 1965 the company will have well over one-quarter billion dollars invested in facilities to serve Southern New Jersey. This will be over five times the company's plant investment of 1947. The total construction program during 1961 is \$22,770,000.

Use of electricity in Southern New Jersey increased 7 per cent over the preceding year, while revenues were up 5 per cent for the same period. The average use of electricity by residential customers was 107 kilowatt hours greater than in 1959. Peak net system demand was 349,600 kilowatts reached in August—an increase of 17,400 kilowatts over 1959.

Atlantic City Electric will continue several hard-hitting sales campaigns designed to promote the total electric home including electric heat and all-year electric air-conditioning. During the past year A.C.E. added 501 electrically-heated homes to its lines and 600 additional total electric homes are expected to be added during the coming year.

Looking ahead to the next 12 months, Atlantic City Electric is planning and working towards the establishment of new records in generating capability, production, sales and revenues.

### Coal Industry Building New Central Research Laboratory

CONSTRUCTION of the coal industry's new central research laboratory on a 30-acre site in Monroeville,

East Pittsburgh, Pa., is under way. Stephen F. Dunn, president of Bituminous Coal Research, Inc., has announced.

Mr. Dunn, president of the affiliated organizations, the National Coal Association and Bituminous Coal Research, Inc., said that this construction will permit the consolidation of the coal industry's research activities now being conducted in Columbus, Ohio and Pittsburgh, Pa. The new research center will be under the direction of James R. Garvey, BCR vice president and director of research.

The National Coal Association in its new office building in Washington, D. C., includes a demonstration heating plant using modern, fully automatic stoker boiler units which burn bituminous coal. The coal industry elected to heat the new research center by electricity to demonstrate another modern heating method using "coal by wire" in the form of electricity. All the foundation concrete, structural concrete, concrete block and bituminous and concrete paving will incorporate the use of fly ash. The use of fly ash permits more economical production of these products with superior structural characteristics.

The building will include a coal technology library of major importance and an auditorium that will permit local, national and international coal science and engineering conferences.

The research center is being constructed primarily from coal industry funds with significant financial participation by the electric utility industry, other major coal users and companies which supply material and equipment to the coal industry.

In announcing the ground breaking, Mr. Dunn said that the laboratory will house the bituminous coal industry's research program which includes basic research on the origin, physical structure and properties, and chemical behavior of coal. The program will emphasize the development of improved coal utilization methods and equipment. This broad objective will encompass preparation, transportation, handling and storage of coal; its use as electric utility fuel; and more efficient utilization in the production of industrial steam and for space heating. Investigations will be carried out on subjects related to coke production and the use of coal by the iron and steel and non-ferrous metal producing industries. Research

will be conducted also in the field of gasification, chemical and other uses of coal. As in the past, the coal industry's research organization will continue to co-operate with groups on projects which are mutually beneficial.

### Power & Light Exhibit, Incorporated for Industry Project At N.Y. World's Fair

A NEW corporation, Power & Light Exhibit, Inc., has been formed to conduct the participation of the investor-owned electric industry in the New York 1964-1965 World's Fair. It was announced recently by E. R. Acker, president of P&LE and chairman of the board of Hudson Gas & Electric Corp.

Mr. Acker said that P&LE associates, Inc. has been selected to design the architectural concept, theme exhibits plan, and programming for the P&LE project.

"We expect to have an exhibit which will be one of the Fair's prime attractions—and that will convey a strong industry story," Mr. Acker said. "We have already taken an important step towards this goal in the selection of a 44,000-square-foot site in an excellent location, which New York 1964-1965 World's Fair Corporation has allocated to us for our exhibition building."

Prior to the formation of P&LE, Edison Electric Institute had announced in September the industry plans to exhibit at the Fair. Mr. Acker continues as chairman of the Institute's World's Fair Committee and the electric company leaders are members of the Committee. Members of the P&LE Board of Directors are: Harlee Branch, Jr., president, The Southern Co., Inc.; H. J. Howell, president, Western Massachusetts Electric Company; J. E. Conner, president, The Montana Power Co.; E. H. Dixon, president, Middle States Utilities, Inc.; C. E. Eble, president, Consolidated Edison Co. of New York, Inc.; Willis Gale, chairman of the board, Commonwealth Edison Co.; E. L. Lindseth, chairman of the board, The Cleveland Electric Illuminating Co.; D. C. Luce, president, Public Service Electric & Gas Co.; E. J. Machold, president, Niagara Mohawk Power Corp.; J. W. Afee, president, Union Electric Co.; Harold Quinton, chairman of the board, Southern California Edison Co.; R. G. Rincliffe, president, Pasadena Electric Co.; W. H. S.

## INDUSTRIAL PROGRESS—(Continued)

in the fall, president, Ohio Edison Co.; and other, Sporn, president, American Electric Power Co., Inc.; J. B. Barnes, president, Texas Electric Service Co.; and J. J. Tuohy, president, Long Island Lighting Co.

Officers of P&LE, in addition to Acker, are: Vice President, Edward Vennard, managing director of Secretary, G. R. Landrith; Treasurer, H. S. Sutton, treasurer of Consolidated Edison Co., of N. Y., and Assistant Treasurer, C. R. K.

VEK, an international firm with headquarters at 600 Fifth Avenue, New York, N. Y., is an alliance of P&LE, Vandenburg-Linkletter Associates, Ebasco Services, Inc., and Wal-Kidde Constructors, Inc. C. M. Vandenburg is president of VEK, as well as of Vandenburg-Linkletter Associates.

### 6 Million Program Planned American Elec. Power System

A construction budget of more than \$16-million—more than half of that for electric power plant construction—has been announced by American Electric Power Company. This compares with 1960 expenditures of \$100-million.

According to Philip Sporn, president, this year's outlay will bring to more than \$1.5-billion the capital expenditures of AEP's six operating companies since the end of World War

II. The \$35-million has been allocated for extension or improvement of the American Electric Power System's transmission and distribution lines. The bulk of the AEP's System-wide plant construction in 1961 will be carried on by Appalachian Power Company, Mr. Sporn said. The subsidiary is expected to spend close to \$100-million. Included in this is work on Appalachian's 440,000-kilowatt, dam hydro project at Smith Mountain on the Roanoke River in Virginia and the new 225,000-kilowatt generating unit at its Clinch River plant at Carbo, Va.

Among the remaining AEP subsidiaries, Ohio Power Company will increase its expected \$25-million—drop expenditures from the estimated \$20-million in 1960, made possible by the virtual completion of its current power plant work last year, Sporn noted.

Indiana & Michigan Electric Company will spend \$18-million and Kentucky Power Company will disburse

the biggest budget in its history—\$8.5-million—largely for the Big Sandy plant, its first major power station.

Wheeling Electric Company plans to spend \$1.6-million and Kingsport (Tenn.) Utilities, Inc., over \$500,000, Mr. Sporn said.

### Commonwealth Associates Services Described in Brochure

A NEW brochure which describes the consulting and design engineering services of Commonwealth Associates Inc. has been completed and is available from J. R. North, president, Commonwealth Associates, Inc., 209 East Washington Avenue, Jackson, Michigan, or from Commonwealth offices in New York City, Washington and Houston.

The 32-page book uses pictures and descriptive captions to describe recent progress in planning and design for electric power generation, transmission, service headquarters and other facilities for utility operations, as exemplified by the firm's work. Commonwealth Associates is the professional engineering affiliate of Commonwealth Services Inc., international management consulting firm.

### G-E to Build Super Heat Reactor to Improve Nuclear Power Economics

IN conjunction with seven New York state electric utilities, General Electric Company plans to build an \$8 million superheat developmental reactor which may help extend the technology of nuclear superheat for eventual application to large scale nuclear power plants. The reactor will be built at the company's Vallecitos Atomic Laboratory near Pleasanton, California. It is expected that it will be ready for operation in 1962.

The seven New York state investor-owned utilities that will help build the reactor have formed a non-profit corporation known as the Empire State Atomic Development Associates, Inc. They will participate in the superheat development program at a cost of \$5,750,000 which will go toward the design and construction of the reactor. These companies are: Central Hudson Gas & Electric Corp., Consolidated Edison Co. of New York, New York State Electric & Gas Corp., Long Island Lighting Co., Niagara Mohawk Power Corp., Orange and Rockland Utilities, Inc. and Rochester Gas & Electric Corp. This group of utilities has as its objective in the

superheat development program the ultimate development, design, and construction of a large 300,000 to 500,000 kilowatt atomic electric generating station.

The new superheat facility which will be the world's first separate superheat reactor, is to be used as an engineering tool to develop superheat reactor fuel, to examine the performance levels of the reactor under various operating conditions, and to test various superheat concepts, including integral and separate superheat. The ability to achieve high temperature or superheated steam conditions in a nuclear system is expected to play a significant part in present programs aimed at increasing the efficiency and improving the economics of nuclear power plants.

### New York State Natural Gas Plans \$7,130,000 Program

NEW YORK State Natural Gas Corporation plans an investment of \$7,130,000 in its production and transmission facilities during 1961.

Major projects planned for the year include the following:

Drilling 30 gas wells in Pennsylvania and New York.

Laying 11 miles of 30-inch pipeline from the company's Borger compressor station at Ithaca, N. Y., into Cortland County.

Constructing 35 measuring stations and laying 30½ miles of small-diameter pipeline in connection with the well drilling program and the purchase of gas from other producers.

Installation of compressor engines in three producing areas to maintain satisfactory volumes of gas in the lines.

Supercharging of five compressor engines at Sabinville, Pa., station to increase the volumes of gas being transmitted.

Installation of another engine at the Utica station to meet expected peak day requirements in 1962.

Gas sales are expected to increase during 1961 by 10.8 billion cubic feet over those of the previous year. The company points out that "estimates received from customers who obtain substantially all of their natural gas supplies from New York Natural Gas show that our sales volumes are expected to increase an average of 7.5 billion cubic feet per year for the next five years. This represents an anticipated increase in sales of approximately 29 per cent by the end of the five-year period."

# PROFESSIONAL DIRECTORY

• This Directory is reserved for engineers, accountants, rate experts, consultants, and others equipped to serve utilities in all matters relating to rate questions, appraisals, valuations, special reports, investigations, financing, design, and construction.

## 64 years of leadership in property valuation The AMERICAN APPRAISAL Company

Home Office: Milwaukee 1, Wisconsin

Offices in 18 cities coast-to-coast

## BLACK & VEATCH CONSULTING ENGINEERS

Electricity, Natural Gas and Water Utilities  
Production, Transmission, Distribution

Reports, Design, Supervision of Construction  
Investigations, Valuation and Rates

1500 MEADOW LAKE PARKWAY, KANSAS CITY 14, MISSOURI (SINCE 1915)

## BONI, WATKINS, JASON & CO., INC.

Economic & Management Consultants

80 Pine Street  
New York 5, N. Y.

919 Eighteenth St., N.W.  
Washington 6, D. C.

Rate Cases

Management and Market Studies

Rate of Return Analysis

Cost of Service Determination

Economic and Financial Reports



## BURNS and ROE, Inc.

ENGINEERS • CONSULTANTS • CONSTRUCTORS

Engineering and Design • Research and Development • Construction •  
Electric, Steam and Hydro Plants • Aeronautical and Missile  
Facilities • Surveys • Nuclear, Chemical and Industrial Plants •  
Transmission • Distribution • Reports

160 WEST BROADWAY, NEW YORK 13, NEW YORK  
Washington, D. C. • Hempstead, L. I. • Santa Monica, Calif.

## SERVICES INC. Management and Business Consultants

### Commonwealth

## ASSOCIATES INC. Consulting and Design Engineers

Commonwealth Building, Jackson, Mich., STate 4-6111

Mention the FORTNIGHTLY—It identifies your inquiry

PROFESSIONAL DIRECTORY  
(continued)

**DAMES & MOORE**

*Consultants in Applied Earth Sciences*

Subsurface investigations for foundations, groundwater, and subsurface structures. Air photo, geological, and geophysical investigations for pipeline and transmission line routes. Geological-geophysical-soil mechanics investigations for recovery and use of marginal land, and for dam design and construction.

CHICAGO	NEW YORK	SAN FRANCISCO	HONOLULU
LOS ANGELES	PORTLAND	SEATTLE	SALT LAKE CITY

**DAY & ZIMMERMANN, INC.**

**ENGINEERS & CONSTRUCTORS**

NEW YORK

PHILADELPHIA

CHICAGO

Design — Electric Line Construction — Management — Reports and Valuations



STANDBY

PEAK SHAVING

100% TOWN or PLANT SUPPLY

• Design

• Engineering

• Construction

**DRAKE & TOWNSEND**

Incorporated

11 WEST 42ND STREET, NEW YORK 36, N. Y.

**EMPIRE GAS  
ENGINEERING CO.**

P. O. Box 1738,  
Atlanta 1, Georgia

LP-gas  
peak shaving  
and stand-by  
plants for  
municipalities  
• Industry  
• design  
• construction



**Ford, Bacon & Davis**  
**Engineers**

VALUATION  
REPORTS

CONSTRUCTION  
RATE CASES

NEW YORK • MONROE, LA. • CHICAGO • SAN FRANCISCO

**FOSTER ASSOCIATES, INC.**

Rate Cases • Cost of Service and Other Regulatory Methods

Rate of Return Analyses • Rate Design

Natural Gas Field Price Problems • Economic and Financial Reports

1523 L STREET, N.W.  
WASHINGTON 5, D.C.

326 MAYO BUILDING  
TULSA 3, OKLAHOMA

403 EMPIRE BUILDING  
CALGARY, ALBERTA

*(Professional Directory Continued on Next Page)*

PROFESSIONAL DIRECTORY

(continued)

FRANCISCO & JACOBUS

ENGINEER & ARCHITECT

*Specializing in the location and design of  
Customers Service Centers and Operating Headquarters*

NEW YORK

WESTBURY

CLEVELAND

TUCSON



GIBBS & HILL, INC.

*Consulting Engineers*

DESIGNERS • CONSTRUCTORS

PENNSYLVANIA STATION NEW YORK 1, N. Y.



GILBERT ASSOCIATES, INC.

ENGINEERS and CONSULTANTS

525 LANCASTER AVE.  
READING, PA.

WASHINGTON • NEW YORK

W. C. GILMAN & COMPANY

CONSULTING ENGINEERS

ELECTRIC — GAS — TRANSIT — WATER

*Financial and Economic Reports*

*Valuations—Rate of Return—Depreciation Studies*

*Traffic Surveys—Fare Analyses*

55 Liberty Street

New York 5, N. Y.

HARZA ENGINEERING COMPANY

*Consulting Engineers*

REPORTS — DESIGN — SUPERVISION

HYDROELECTRIC PLANTS AND DAMS — TRANSMISSION LINES — FLOOD CONTROL —  
IRRIGATION — RIVER BASIN DEVELOPMENT

400 West Madison Street

Chicago 6, Illinois

HOOSIER ENGINEERING COMPANY

*Erection and Maintenance of  
Electrical Transmission and Distribution Lines*

1350 HOLLY AVENUE

• COLUMBUS, OHIO

*Mention the FORTNIGHTLY—It identifies your inquiry*

PROFESSIONAL DIRECTORY  
(continued)

**JENSEN, BOWEN & FARRELL**  
ENGINEERS

APPRAISALS — DEPRECIATION STUDIES — PROPERTY RECORDS  
COST TRENDS — SPECIAL STUDIES — REPORTS

for Rate Cases, Security Issues, Regulatory and Accounting Requirements

Michigan Theatre Building

Ann Arbor, Michigan

Normandy 8-7778

**Personalized Piping System Flexibility Analyses**

Piping flexibility studies made with  
Kellogg's electronic computer,  
individualized on your company forms.



Available on a confidential basis  
to consulting engineers and engineering  
departments. Write for details to:

POWER PIPING DIVISION

The M. W. Kellogg Company, 711 Third Avenue, New York 17, N. Y.



*The Kuljian Corporation*

ENGINEERS • CONSTRUCTORS  
POWER PLANT SPECIALISTS

DESIGN • CONSTRUCTION • MANAGEMENT  
SURVEYS • INVESTIGATIONS • REPORTS

1200 N. BROAD ST., PHILADELPHIA 21, PA.

**William S. Leffler, Engineers Associated**

GAS  
ELECTRIC  
WATER  
TELEPHONE

Utility Management Consultants for past 35 years Specializing in  
CLASS COST ANALYSES for Developing CLASS RATES

REGULATORY  
AND  
MUNICIPAL  
PROBLEMS

OF RETURN and UNIT COSTS for use in  
RATE CASES AND MODERNIZATION of Rate Structures

DARIEN, CONN.

Send for brochure: "The Value of Cost Analysis to Management"

17 BAYWATER DRIVE

**N. A. LOUGEE & COMPANY**

Engineers and Consultants

RATE CASES — APPRAISALS — DEPRECIATION STUDIES  
BUSINESS AND FEASIBILITY STUDIES — REPORTS

120 Broadway

New York

**Pioneer Service & Engineering Co.**

CONSULTING, DESIGNING AND  
OPERATING ENGINEERS  
PURCHASING

281 SOUTH LA SALLE STREET



SPECIALISTS IN  
ACCOUNTING, FINANCING, RATES,  
INSURANCE AND DEPRECIATION

CHICAGO 4, ILLINOIS

(Professional Directory Continued on Next Page)

PROFESSIONAL DIRECTORY  
(continued)

*Special Operating Studies  
Planning and Design  
Reports for Financing  
Economic Studies  
Regulatory Representation*

R.A. RANSOM COMPANY, INC.

consulting engineers with a business viewpoint

1028 Connecticut Ave., N.W., Washington 6, D.C.  
61 Broadway, New York 6, N.Y.

**SANDERSON & PORTER**  
CONSTRUCTION • REPORTS  
SURVEYS

NEW YORK

**S & P**

NEW YORK

**SARGENT & LUNDY**  
ENGINEERS

*Consultants to the Power Industry*

• STUDIES • DESIGN • SUPERVISION  
140 South Dearborn Street, Chicago 3, Ill.



**STANDARD RESEARCH CONSULTANTS, INC.**

Rate of Return • Valuations • Capital Costs  
Customer Surveys • Depreciation Studies  
Regional Economic Studies • Property Records

345 Hudson St.

Watkins 4-6400

New York 14, N.Y.

**STONE & WEBSTER**  
**ENGINEERING CORPORATION**  
DESIGN • CONSTRUCTION • APPRAISALS • EXAMINATIONS  
REPORTS • CONSULTING ENGINEERING

Chicago

Houston

San Francisco

Los Angeles

Seattle

Toronto

Calgary



NEW YORK  
90 Broad Street  
BOSTON  
49 Federal Street

1304 ST. PAUL STREET

Publishers of the **HANDY-WHITMAN INDEX  
OF PUBLIC UTILITY CONSTRUCTION COSTS**,  
now in its 35th year and a companion publication the  
**HANDY-WHITMAN INDEX OF WATER UTILITY  
CONSTRUCTION COSTS**  
BALTIMORE 2, MARYLAND

*Mention the FORTNIGHTLY—It identifies your inquiry*

PROFESSIONAL DIRECTORY  
(concluded)

**BURNS & McDONNELL**  
*Engineers-Architects-Consultants*  
4600 E. 63rd St. Trafficway  
Kansas City 41, Missouri

**LUTZ & MAY COMPANY**

*Consulting Engineers*

STEAM, GAS & DIESEL POWER STATIONS  
PUMPING PLANTS—ELECTRIC SYSTEMS  
REPORTS—DESIGNS—APPRaisALS  
1009 Baltimore

Kansas City 6, Mo.

**EARL L. CARTER**  
*Consulting Engineer*  
REGISTERED IN INDIANA, NEW YORK, OHIO,  
PENNSYLVANIA, WEST VIRGINIA, KENTUCKY  
*Public Utility Valuations, Reports and  
Original Cost Studies*  
910 Electric Building Indianapolis, Ind.

**MINER AND MINER**  
**CONSULTING ENGINEERS**

INCORPORATED  
GREELEY, COLORADO

Littleton, Colorado  
Tucson, Arizona Phoenix, Arizona

**COFFIN & RICHARDSON, INC.**  
**CONSULTING ENGINEERS**  
Appraisals and Valuations For Regulatory,  
Tax, and Other Purposes  
Rate Case Preparation—Cost of Service Studies  
Original Cost and Depreciation Studies  
Rate Design  
88 Devonshire St., Boston 9, Massachusetts

**PITTSBURGH TESTING  
LABORATORY**

Radiography—Soils Mechanics  
Testing—Inspection—Analysis

Main Office, Pittsburgh, Pa.  
32 Laboratories in Principal Cities

**ENGINEERS, CONSTRUCTION AND  
MAINTENANCE CONTRACTORS  
for the GAS INDUSTRY**  
**CONSOLIDATED  
GAS AND SERVICE CO.**  
327 So. LaSalle St., Chicago 4, Ill.

**A. S. SCHULMAN ELECTRIC CO.**  
*Electrical Contracting Engineers*

Founded 1890

POWER STATION—INDUSTRIAL—  
COMMERCIAL—TRANSMISSION LINES—  
DISTRIBUTION

2416 S. MICHIGAN AVE. CHICAGO, ILL. Tampa  
Los Angeles

**GANNETT FLEMING CORDDRY AND CARPENTER, INC.**  
**ENGINEERS**  
Investigations—Reports—Appraisals  
Original Cost and Depreciation Studies  
Rate Analyses—Insurance Surveys  
HARRISBURG, PENNSYLVANIA

**SVERDRUP & PARCEL**

*Engineers & Consultants*

Design, Construction Supervision  
Steam and Hydro Power Plants  
Power Systems—Industrial Plants  
Studies—Reports

St. Louis • San Francisco • Washington

**INTERNUCLEAR COMPANY**  
Nuclear consultants, engineers, and  
designers  
Economics of Nuclear Power, Reactor  
Analysis and Design, Shielding,  
Special Applications  
Clayton 5 Missouri

**A. W. WILLIAMS INSPECTION CO., INC.**

*Specialized Inspection Service*

Poles, Crossarms, Lumber, Piles, Crossties  
Preservative Treatment and Preservative Analysis  
208 Virginia St., Mobile, Ala.  
New York St. Louis Portland  
Inspectors stationed throughout the U.S.A.

**Jackson & Moreland, Inc.**  
**Jackson & Moreland International, Inc.**  
*Engineers and Consultants*  
ELECTRICAL—MECHANICAL—STRUCTURAL  
DESIGN AND SUPERVISION OF CONSTRUCTION  
FOR  
UTILITY, INDUSTRIAL AND ATOMIC PROJECTS  
SURVEYS—APPRAISALS—REPORTS  
MACHINE DESIGN—TECHNICAL PUBLICATIONS  
BOSTON — WASHINGTON — NEW YORK

Representation in this Professional Directory  
may be obtained at very reasonable rates.  
Kindly address inquiries to:

ADVERTISING DEPARTMENT  
Public Utilities Fortnightly  
332 Pennsylvania Building  
Washington 4, D. C.

Mention the FORTNIGHTLY—It identifies your inquiry

# INDEX TO ADVERTISERS

## A

*Allen & Company .....	39
*Allied & Chemical Corporation—Plastics & Coal Chemicals Division .....	39
*Allis-Chalmers Manufacturing Company .....	34
American Appraisal Company, The .....	Inside Back Cover
*American Telephone & Telegraph Co. .....	17
Analysts Journal, The .....	17

## B

*Babcock & Wilcox, The .....	34
*Bell Telephone System .....	34
Black & Veatch, Consulting Engineers .....	34
*Blyth & Company, Inc. .....	34
Boni, Watkins, Jason & Co., Inc. .....	34
Burns & McDonnell, Engineers .....	39
Burns & Roe, Inc. .....	34
*Burroughs Corporation .....	34

## C

Carter, Earl L., Consulting Engineer .....	39
Coffin & Richardson, Inc. .....	39
*Coleman Company, Inc., The .....	39
Columbia Gas System, Inc., The .....	11
Combustion Engineering, Inc. .....	26-27
Commonwealth Associates, Inc. .....	31, 34
Commonwealth Services, Inc. .....	31, 34
Consolidated Gas and Services Company .....	39

## D

Dames & Moore .....	35
Day & Zimmermann, Inc., Engineers .....	35
*Dodge Division of Chrysler Corp. .....	35
Drake & Townsend, Inc. .....	35

## E

*Eastman Dillon, Union Securities & Company .....	22-23
*Ebasco Services Incorporated .....	35
Electro-Motive Division, General Motors .....	22-23
Empire Gas Engineering Company .....	35

## F

First Boston Corporation, The .....	24
Ford, Bacon & Davis, Inc., Engineers .....	35
Foster Associates, Inc. .....	35
Francisco & Jacobus .....	36

## G

Gannett Fleming Corddry and Carpenter, Inc. .....	39
General Electric Company .....	Outside Back Cover
Gibbs & Hill, Inc., Consulting Engineers .....	36
Gilbert Associates, Inc., Engineers .....	36
Gilman, W. C., & Company, Engineers .....	36
*Glore, Forgan & Company .....	36
*G&W Electric Specialty Company .....	36

## H

Halsey, Stuart & Company, Inc. .....	7
*Harriman, Ripley & Company .....	36
Harza Engineering Company .....	36
Hoosier Engineering Company .....	36
*Hough, Frank G., Company, The .....	21

## I

*International Business Machines Corp. .....	39
Internuclear Company .....	39
Irving Trust Company .....	21

## Professional Directory .....

## J

Jackson & Moreland, Inc., Engineers .....	39
Jensen, Bowen & Farrell, Engineers .....	37

## K

Kellogg, M. W., Company, The .....	4-5, 37
*Kidder, Peabody & Company .....	37
*Kuhn Loeb & Company .....	37
Kuljian Corporation, The .....	37

## L

*Langley, W. C., & Co. .....	37
Leffler, William S., Engineers Associated .....	37
*Lehman Brothers .....	37
*Loeb, (Carl M.) Rhoades & Co. .....	37
Lougee, N. A., & Company .....	37
Lutz & May Company, Consulting Engineers .....	39

## M

*Main, Chas. T., Inc., Engineers .....	39
*McCulloch Corporation .....	39
*Merrill Lynch, Pierce, Fenner & Smith, Inc. .....	39
Miner & Miner, Consulting Engineers .....	39
Moloney Electric Company .....	9
*Morgan Stanley & Company .....	39

## N

National Association of Railroad & Utilities Commissioners .....	18
---	----

## O

*Osmose Wood Preserving Company of America, Inc. .....	39
--	----

## P

Pioneer Services & Engineering Company .....	37
Pittsburgh Testing Company .....	39
*Plastics and Coal Chem. Div., Allied Chemical Corp. .....	39
*Pole Sprayers, Inc. .....	39

## R

Ransom, R. A., Company, Inc. .....	38
Recording & Statistical Corporation .....	28
Remington Rand Div. of Sperry Rand Company Corporation .....	13

## S

Sanderson & Porter, Engineers .....	38
Sargent & Lundy, Engineers .....	38
Schulman, A. S., Electric Co., Engineers .....	39
*Smith Barney & Company .....	38
Standard Research Consultants, Inc. .....	38
Stone and Webster Engineering Corporation .....	38
Stone & Webster Service Corporation .....	29
Sverdrup & Parcel, Engineers & Consultants .....	39

## T

*Texoma Enterprises, Inc. .....	39
---------------------------------	----

## U

United Engineers & Constructors Inc. .....	15-16
United States Motors Corporation .....	Inside Front Cover

## W

*Westinghouse Electric Corporation .....	38
*White, Weld & Co. .....	39
Whitman, Requardt and Associates .....	39
Williams, A. W., Inspection Co., Inc. .....	39

# Rambler for '61...



**American 4-door Super Sedan**—For 1961 the Rambler American is more compact *outside*, yet has room for six average adults *inside*. A Rambler American Custom swept to first place over all other compacts in the 1960 Mobilgas Economy Run! Also available in 2-door sedan, 2-door business coupe, 2- and 4-door station wagons.

## FULL LINE OF FLEET PROVED COMPACT CARS FROM **RAMBLER**

Rambler for 1961 offers three series of compact fleet cars—world's widest choice of models—with a host of man-saving, money-saving features including . . .

new die-cast aluminum engine proved in two million rugged test miles for durability, performance and economy . . . standard on Classic Custom . . . optional extra on other Classic models.

World's First! New Ceramic-Armored muffler or tail-pipe will be repaired or replaced without charge by a Rambler dealer, if it is defective in materials or workmanship, for life of car while original buyer owns it.

new molded fiber-glass ceiling that cuts road noise 50% . . . increases headroom . . . featured on all Classic and Ambassador models.

Latest fleet surveys prove Rambler maintenance costs least of all cars, Rambler resale value is tops. See much more money you save with Rambler—America's Economy King!

**American Motors Fleet Department will coordinate purchases for fleet users throughout the country—with or without trade.**

**No obligation! Demonstrators available for "on-the-job" test!**

**SEE YOUR RAMBLER DEALER**  
or write or wire  
**FLEET SALES DEPARTMENT—Dept. J-119**

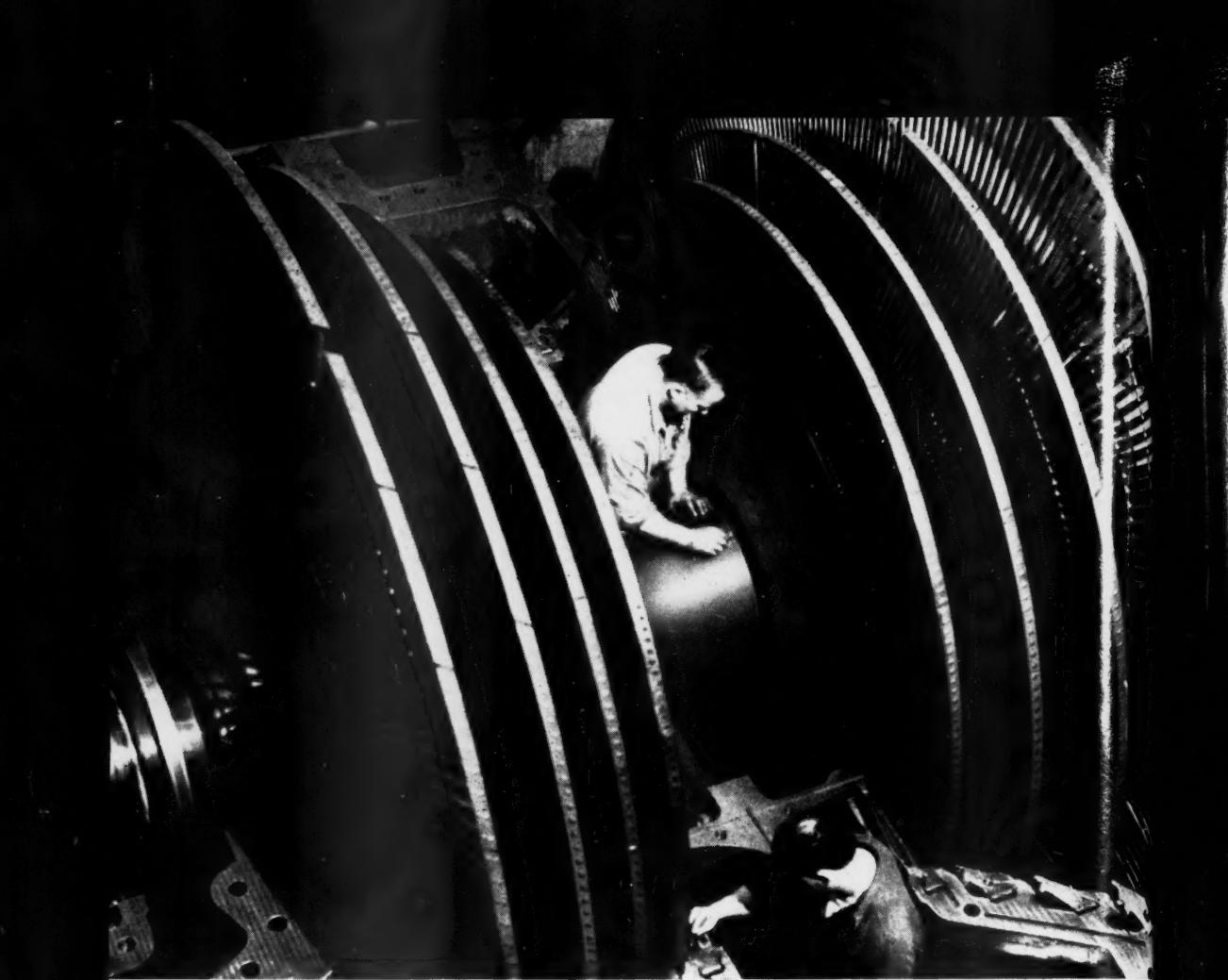
**AMERICAN MOTORS CORPORATION**  
14250 Plymouth Road, Detroit 32, Michigan



**Rambler Classic 4-door Super Station Wagon**—Here's 80 cubic feet of cargo room for tools, samples, display material, light machinery. Choose from two 6's or high-performing V-8. Initial price may be actually less than competitive sedans you are now using. Choice of heavy duty equipment.



**Rambler Classic Super 4-door Sedan**—Fast becoming America's most popular fleet sedan. If your company leases fleet units, ask your leasing company for low Rambler rates or write us for the names of leasing companies with whom we have working arrangements.



Precision workmanship by skilled craftsmen contributes to the efficiency and reliability of this 90-ton, 1800-rpm, low-pressure steam turbine.

# General Electric steam turbine-generators give you increased efficiency and reliability

Three areas where General Electric is continually making progress in improving steam turbine-generator reliability and efficiency are:

**Pre-engineered designs**—engineered simplicity is the key in these advanced turbine designs, ready now to meet your power generation needs.

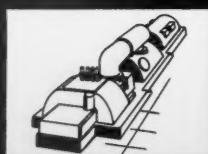
**Nationwide service program**—General Electric's service organization extends right to your neighborhood to give you personalized service by experienced representatives familiar with your particular machines and their place on your system.

**Manufacturing breakthrough**—with specialized automated machine tools and manufacturing techniques General Electric produces precision components that were unheard of only a few years ago.

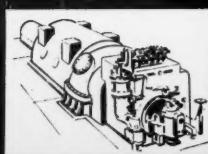
*Progress Is Our Most Important Product*

**GENERAL**  **ELECTRIC**

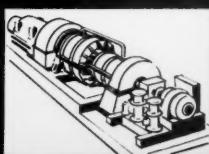
General Electric  
Turbine-Generators  
Help Keep  
Power Costs Low



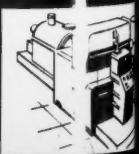
Steam turbine-generators  
for large blocks of power



Steam turbine-generators  
100,000 kw and lower



Gas turbines for peaking,  
base load, combined cycles



Mechanical drive  
units